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A checklist to the wasps of Peru (Hymenoptera, Aculeata)

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Abstract

The first checklist to the 225 genera and 1169 reported species-group taxa of aculeate wasps of Peru is presented. The list is based on a literature survey and examination of Peruvian entomological collections and include locality references for each taxon. Bibliographic references for the identification of families, genera, and species are provided when available. The occurrence data are published in addition as downloadable files (doi: 10.3897/zookeys.15.196.app.2.ds, doi: 10.3897/zookeys.15.196.app.3.ds, and doi: 10.3897/zookeys.15.196.app.4.ds) and were uploaded onto GBIF infrastructure simultaneously with the publication process. The following new combinations are proposed: *Ancistroceroides cirrifer* **comb. n.** (Zavattari, 1912), *Ancistrocerus epicus* **comb. n.** (Zavattari, 1912), and *Stenodynerus corallineipes* **comb. n.** (Zavattari, 1912).

Keywords

Aculeata, Biodiversity, Gazetter, Hymenoptera, Sampling coverage, Peru

Introduction

Aculeate wasps, or stinging wasps, are a fascinating group of biologically diverse insects, ranging from wasps living in large social colonies with more than a million individuals (*Agelaia vicina*) to solitary, rarely collected species of only a few millimeters in length (Hanson and Gauld 2006, Fernández and Sharkey 2006). They range in host use, from parasitoids (e.g., Dryinidae) that control agriculturally important pests, to the giant tarantula hawks (Pompilidae, *Pepsis*) that paralyze spiders and use them as

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provisioning for their larvae. The abundance of wasps in Peru is evident in most parts of the country, inhabiting both lowland forests and Andean crop fields. Several species are known from the surroundings of Puno at the border of the Titicaca lake at more than 3800 meters above sea level, although the social Vespidae (Polistinae) do not reach this altitude (Weyrauch 1943).

The present list attempts to include all taxa of Aculeata wasps (Hymenoptera: Apocrita) recorded from Peru in the literature and from the entomological collection of the Museo Nacional de Historia Natural (MUSM), Lima, Peru. The aculeate wasps *sensu* Brothers (1999) include the following families within three superfamilies in the Neotropical region: Apoidea, including Ampulicidae, Crabronidae, Sphecidae, and the bees (Andrenidae, Colletidae, Halictidae, Megachilidae, Apidae); Chrysidoidea with Bethylidae, Chrysididae, Dryinidae, Embolemidae, Plumariidae, Sclerogibbidae, and Scolebythidae; and Vespoidea, with Bradynobaenidae, Mutillidae, Pompilidae, Rhopalosomatidae, Sapygidae, Scoliidae, Vespidae, Tiphiidae, and the ants (Formicidae). Peruvian bees are listed elsewhere (Rasmussen and Ascher, in preparation, 800+ spp.) and ants (Formicidae, 300+ spp.) have been covered in the literature for Peru (Escalante 1993), South America (Kempf 1972, Brandão 1991), and worldwide (Bolton 1994, 1995, Ward et al. 1996). Recently much of the ant information has been made available on the internet as well (http://www.antbase.org).

It is expected that this checklist is incomplete and likely inadequate for certain groups. Many regions of Peru have not been sampled or have only been surveyed for brief periods. The checklist should still prove useful as a reference and will give indication of the diversity in Peru of families and genera, although biased toward previous collecting efforts and taxa treated in monographic revisions. For example, there are only two named species of *Pseudomethoca* (Mutillidae) in Peru according to Quintero and Cambra (1996), whereas they report an additional 17 undescribed species. The checklist will in that case obscure the real diversity of this genus in Peru.

Identification of Hymenoptera families and genera can be done with the aid of specialized literature, including the works by Goulet and Huber (1993), Hanson and Gauld (1995, 2006), and Fernández and Sharkey (2006) that include keys for identification of all Hymenoptera families, tribes, and some lower rank groups. Hanson and Gauld (2006) and Fernández and Sharkey (2006) are particularly useful, providing keys in Spanish to subfamilies of all Neotropical Hymenoptera.

The alphabetic checklist includes references to primary taxonomic literature in the general introduction only if they include information pertinent to the genera occurring in Peru. References to species-level taxonomic literature are placed in hard brackets following the genus entry. Synonymic listing is limited to species originally described or reported from Peru. Peruvian wasps have mainly been collected by foreigners visiting the country (Otto Garlepp, Luis Peña, E.I. Schlinger and E.S. Ross, etc.), or foreigners residing in the country, in particular Wolfgang Karl Weyrauch (1940, 1942, 1943) and Felix Woytkowski (1978). Peruvian nationals, such as Renán García (1978) and Francisco Carrasco (1972) sent specimens for identification, whereas Carl Oswald Schunke (Chanchamayo, Pucallpa) and Emil

Boettger (Huancabamba) sold Hymenoptera specimens to museums and collectors earlier in the 20th century, but otherwise little has been done to synthesize the Peruvian fauna until now.

A total of 1169 taxa are reported, representing 16 families, 34 subfamilies, 28 tribes, and 225 genera. Genera in Peru are compared to the total number of genera in the Neotropical region and globally in Table 1. A total of 364 taxa were originally described from Peru, this is noted with an asterisk [*] in the checklist, along with the presumably endemic status for 226 of these taxa.

The 353 Peruvian localities reported are mapped on Figure 1 and listed with coordinates and altitude in Appendix 1. The complete occurrence data are published

Table 1. Aculeate Hymenoptera families present in Peru. Approximate number of genera of each family are indicated for Peru/Neotropical region/Globally based on this study and Hanson and Gauld (2006). Subfamilies present in Peru are also indicated, including the approximate number of genera in the country for each.

The apoid families

- Ampulicidae (1/3/6)
- Crabronidae (57/116/233)
  - Astatinae (1)
  - Bembicinae (18)
  - Crabroninae (28)
  - Pemphredoninae (8)
  - Philanthinae (2)
- Sphecidae (12/14/19)
  - Ammophilinae (2)
  - Chloriontinae (1)
  - Sceliphrinae (6)
  - Sphecinae (3)

The chrysidoid families

- Bethylidae (13/27/82)
  - Bethylinae (1)
  - Epyrinae (8)
  - Pristocerinae (4)
- Chrysididae (12/25/80)
  - Amiseginae (2)
  - Chrysidinae (9)
  - Cleptinae (1)
- Dryinidae (9/21/40)
  - Anteoninae (2)
  - Aphelopinae (2)
  - Dryininae (2)
  - Gonatopodinae (3)
- Embolemidae (1/2/2)
- Plumariidae (1/3/5)
- Sclerogibbidae (1/1/4)
- Scolebythidae (1/2/4)

The vespoid families

- Bradynobaenidae (0/5/8)
- Mutillidae (18/47/150)
  - Mutillinae (2)
  - Sphaeropthalminae (16)
- Pompilidae (33/57/135)
  - Ceropalinae (2)
  - Ctenocerinae (1)
  - Pepsinae (14)
  - Pompilinae (15)
  - Unknown position
    - [=Notocyphinae] (1)
- Rhopalosomatidae (2/3/4)
- Sapygidae (0/3/12)
- Scoliidae (1/2/22)
  - Campsomerinae (1)
- Tiphiidae (11/35/120)
  - Anthoboscinae (1)
  - Myzinae (1)
  - Thynninae (6)
  - Tiphiinae (3)
- Vespidae (53/71/261)
  - Eumeninae (32)
  - Masarinae (2)
  - Polistinae (19)

in addition as a downloadable file (online supplementary material, Appendix 2) and were uploaded onto GBIF infrastructure simultaneously with the publication process. Two kml files for viewing interactively species-by-locality (online supplementary material, Appendix 3: indexed by family, genus, species) or locality alone (online supplementary material, Appendix 4: indexed by name) in Google Earth (http://earth.google.com/) are available for download as well. As most of the localities indicated on the collecting labels are only points of reference (mostly to nearest city), the georeferenced points in Appendix 1 and the KML files are only indicative of the coarse collecting locality, likely not the exact locality where the specimens were captured. We used data from Lamas (1976), Stephens and Traylor (1983), and an extensive collection of topographical maps in the Department of Entomology at Museo de Historia Natural (Lima) to compile information about collecting localities. The best sampled Departments are Lima (42 different localities) and Cusco (41), whereas most species have been reported from Huánuco (347 species), mainly in the area around Tingo Maria, while Moquegua has no wasps or localities recorded at all. The abbreviations for Department used in the checklist are as follows, including the total number of taxa reported for each Department: *AM*, Amazonas (50); *AN*, Ancash (13); *AP*, Apurímac (29); *AR*, Arequipa (28); *AY*, Ayacucho (29); *CA*, Cajamarca (53); *CU*, Cusco (260); *HU*, Huánuco (347); *HV*, Huancavelica (6); *IC*, Ica (5); *JU*, Junín (263); *LA*, Lambayeque (44); *LI*, Lima (100); *LL*, La Libertad (43); *LO*, Loreto (267); *MD*, Madre de Dios (158); *MO*, Moquegua (0); *PA*, Pasco (96); *PI*, Piura (47); *PU*, Puno (16); *SM*, San Martin (79); *TA*, Tacna (7); *TU*, Tumbes (16); *UC*, Ucayali (141).

The Apoid Families

Ampulicidae

Only an undetermined species of *Ampulex* was recorded from Peru by Cambra (1993).

Ampulex Jurine, 1807
1. sp.: MD (Pakitza)

Crabronidae

Bohart and Menke (1976) and Menke and Fernández (1996) provided keys for identifications of the genera. The latter key is bilingual in English and Spanish for all the Neotropical genera. Amarante (2002) listed all Neotropical species, while Pulawski (2009a, b) listed all taxonomic literature and world species of Crabronidae and Sphecidae. Hanson and Gauld (2006) and Fernández and Sharkey (2006) provided keys to the subfamilies and tribes of Crabronidae and Sphecidae.

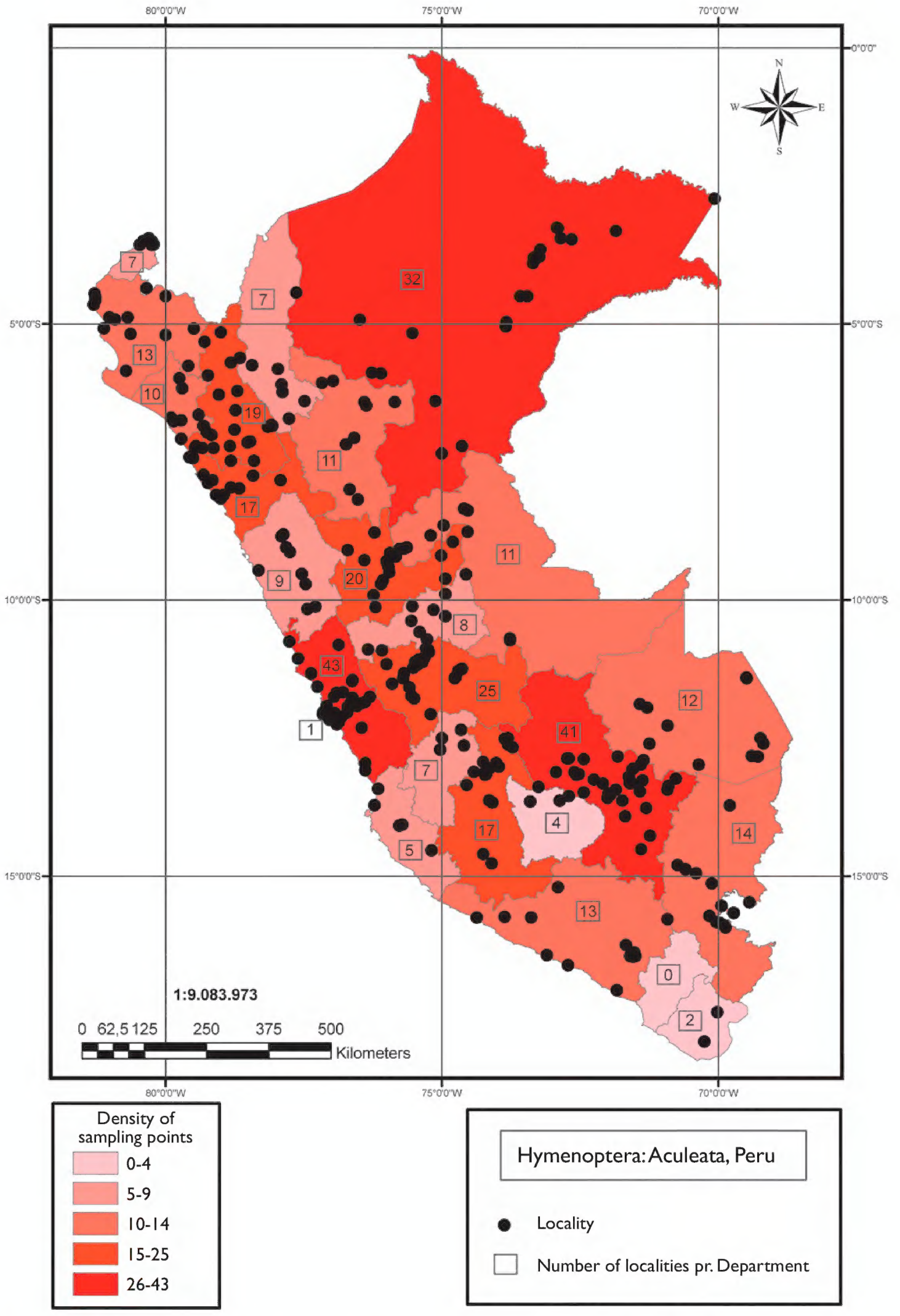

Figure 1. Map of Peru with the 353 collecting localities marked. Density of collecting points for each department is indicated by color intensity.

Astatinae

Astata Latreille, 1796 [Parker 1968]

2. *alpaca* F. Parker, 1968: *, LI (Cañete, Lima)
3. *australasiae* Shuckard, 1838: CU (Cusco), (=*chilensis* de Saussure, 1854, =*dimidiata* Taschenberg, 1880)

Bembicinae

Bembicini

Argogorytes Ashmead, 1899 [Bohart 2000]

4. *areatus* (Taschenberg, 1875): HU (Tingo María)
5. *umbratilis* R. Bohart, 2000: CU (Cusco)

Bembecinus A. Costa, 1859 [Willink 1949]

6. *agilis* (F. Smith, 1856)
7. *bolivari* (Handlirsch, 1892): AY, HU (Pachitea, Tingo María), HV, JU (La Merced), PA (Puerto Bermúdez)

Bembix Fabricius, 1775 [Parker 1929]

8. *citripes* Taschenberg, 1870: LL (Chicama)

Bicyrtes Lepeletier de Saint Fargeau, 1845 [Bohart 1996]

9. *chilicola* R. Bohart, 1996: LA (Lambayeque)
10. *discisus* (Taschenberg, 1870): HU (Palcazu), LI, LO (La Sombra), MD (Pakitza)
11. *odontophorus* (Handlirsch, 1889): *, LO (Nauta), PA (Puerto Bermúdez)
12. *variegatus* (Olivier, 1789): MD (Pakitza)

Clitemnestra Spinola, 1851 [Bohart 2000]

13. *championi* (Cameron, 1890)
14. *lissa* R. Bohart, 2000: *, LI (Chosica)
15. *puyo* R. Bohart, 2000: HU (Tingo María)
16. *sanambrosiana* (Pérez D'Angello, 1980): HU (Huánuco), LI (Lima)
17. *schlingeri* R. Bohart, 2000: Endemic*, HU (Monzón)
18. *vardyorum* R. Bohart, 2000: *, CU (Cusco), LI ("Ocean cliff")

Hoplisoides Gribodo, 1884 [Bohart 2000]

19. *feae* (Handlirsch, 1895): Endemic*, PI (Palo Negro)
20. *fuscus* (Taschenberg, 1875)
21. *helvolus* R. Bohart, 2000: LA (Lambayeque)
22. *jordani* (Handlirsch, 1895): LI (Matucana)
23. *peruvicus* R. Bohart, 2000: Endemic*, LI (San Bartolomé), LL (Samne)
24. *rasilis* R. Bohart, 2000: Endemic*, LI (Cupiche, Surco)
25. *vespoides* (F. Smith, 1873)

Megistommum Schulz, 1906 [Bohart 2000]

26. *nigriceps* (F. Smith, 1873)
27. *procerum* (Handlirsch, 1888): HU (Tingo María), UC (Ucayali)

Microbembex Patton, 1879 [Parker 1929]

28. *ciliata* (Fabricius, 1804): JU, LI, PI
29. *equalis* J. Parker, 1929: *, AR (Tingo)

Neogorytes R. Bohart in Bohart & Menke, 1976 [Bohart 2000]
- *30.* *ecuadorae* R. Bohart in Bohart & Menke, 1976
- *31.* *incaorum* R. Bohart, 2000: Endemic*, AM (Chachapoyas), CU (Machu Picchu)

Rubrica J. Parker, 1929 [Parker 1929]
- *32.* *denticornis* (Handlirsch, 1890): LI, PI
- *33.* *nasuta* (Christ, 1791): LI (La Molina), PI, SM, (=*surinamensis* De Geer, 1778, =*canadensis* Cabrera la Rosa, 1993 *nomen nudum*)

Sagenista R. Bohart, 1967 [Bohart 2000]
- *34.* *brasiliensis* (Shuckard, 1838)
- *35.* *cayennensis* (Spinola, 1841)
- *36.* *scutellaris* (Spinola, 1841)

Sphecius Dahlbom, 1843
- *37.* *spectabilis* (Taschenberg, 1875): SM (Tarapoto) [new record]

Stenogorytes Schrottky, 1911 [Bohart 2000]
- *38.* *facilis* (F. Smith, 1873)
- *39.* *melanogaster* (Schrottky, 1911): CU (Cusco), HU (Tingo María)

Stictia Illiger, 1807 [Parker 1929]
- *40.* *andrei* (Handlirsch, 1890): LO (Nauta)
- *41.* *croceata* (Lepeletier de Saint Fargeau, 1845): Endemic*, HU (Iparía), LO (Nauta), (=*proserpina* Handlirsch, 1890)
- *42.* *decorata* (Taschenberg, 1870)
- *43.* *infracta* J. Parker, 1929: Endemic*, PI (Piura)
- *44.* *maculata* (Fabricius, 1804): JU (El Campamento), UC
- *45.* *punctata* (Fabricius, 1775)
- *46.* *signata* subsp. *signata* (Linnaeus, 1758): AR, AY, HV, LI (La Molina, Lima)
- *47.* *signata* subsp. *aricana* Lohrmann, 1948
- *48.* *sombrana* J. Parker, 1929: Endemic*, LO (La Sombra)

Trichostictia J. Parker, 1929 [Parker 1929]
- *49.* *brunneri* J. Parker, 1929: AR, LI (Lima)
- *50.* *vulpina* (Handlirsch, 1890): LI, HU

Zyzzyx Pate, 1937
- *51.* *chilensis* (Eschscholz, 1822): (=*peruvianus* Guérin-Méneville, 1835)

Nyssonini

Foxia Ashmead, 1898
- *52.* *divergens* (Ducke, 1903): MD (Pakitza)

Metanysson Ashmead, 1899 [1 sp.: MD (Pakitza)] [Cambra 1993]
- 53. sp/spp.

Crabroninae

Bothynostethini

Bothynostethus Kohl, 1884 [1 sp.: MD (Pakitza)] [Cambra 1993]
- *54.* sp/spp.

Scapheutes Handlirsch, 1887 [Menke & Vardy 1980]

55. *brasilianus* Handlirsch, 1895: HU (Tingo María), UC (Pucallpa)
56. *flavopictus* (F. Smith, 1860)
57. *laetus* (F. Smith, 1860): CU (Quincemil), HU (Previsto, Tingo María), JU (Chanchamayo), UC (Pucallpa)

Crabronini [Leclercq 1954]

Alinia Antropov, 1993

58. *alinae* Leclercq, 1993

Anacrabro Packard, 1866 [Leclercq 1996]

59. *benoistianus* Leclercq, 1951: HU (Tingo María)
60. *meridionalis* Ducke, 1908: LO (Iquitos)

Chimila Pate, 1944 [Leclercq 1980, 2005c]

61. *mocoana* Leclercq, 1980: CU (Quincemil)

Crossocerus Lepeletier & Brullé, 1835 [Leclercq 2000]

Subgenus: *Blepharipus* Lepeletier & Brullé, 1835

62. *callani* Pate, 1941: *, no locality given, (=*potosus* Leclercq, 1968)
63. *pignatus* Leclercq, 1968: CU (Callanga)
64. *porexus* Leclercq, 1968: AM (Rodríguez de Mendoza)

Echucoides Leclercq, 1957 [Leclercq 1957]

65. *cercericus* (Leclercq, 1957): *, CU (Callanga)
66. *piratus* (Leclercq, 1957): Endemic*, CU (Callanga)

Ectemnius Dahlbom, 1845 [Leclercq 1972, 1991]

67. *aztecus* subsp. *peruvianus* Leclercq, 1991: Endemic*, AM (Chachapoyas)
68. *basiflavus* (Brèthes, 1910): HU (Tingo María), LL (Moche), UC (Yarinacocha)
69. *carinatus* (F. Smith, 1873): HU (Tingo María)
70. *domingensis* Leclercq, 1950: LA (Olmos)
71. *schwarzi* subsp. *servitorius* Leclercq, 1972: JU (Chanchamayo)

Enoplolindenius Rohwer, 1911

Subgenus: *Enoplolindenius* Rohwer, 1911

72. *pugnans* (F. Smith, 1873): *, PA (Puerto Bermúdez), (=*aymara* Pate, 1942)

Subgenus: *Iskutana* Pate, 1942

73. *callangae* Leclercq, 1968: Endemic*, CU (Callanga)

Entomocrabro Kohl, 1905 [Leclercq 1981, 2006]

74. *amahuaca* Pate, 1941: *, LO (Explorama), PA (Puerto Bermúdez), SM (Rioja)
75. *duckei* (Kohl, 1905): MD (Pakitza)
76. *rurrenus* Leclercq, 1980: MD (Pakitza)
77. *sacuya* Pate, 1941: Endemic*, MD (Pakitza), PA (Puerto Bermúdez)
78. *sagax* Leclercq, 2006: Endemic*, AM (Chachapoyas)

Foxita Pate, 1942 [Leclercq 1980, 2005b]

79. *bara* subsp. *patei* Leclercq, 1951: CU (Quincemil)
80. *beieri* Leclercq, 1955: AM (Rodríguez de Mendoza)
81. *benitiana* Leclercq, 1980: MD (Pakitza)

82. *senci* Pate, 1942: JU, PA (Puerto Bermúdez)

Lestica Billberg, 1820

83. *sculpturata* (F. Smith, 1873)

Pae Pate, 1944 [Leclercq 1995, 2005a]

84. *amaripa* Pate, 1944: HU (Tingo María), MD (Puerto Maldonado)

85. *nasicornis* (F. Smith, 1873): AM (Rodríguez de Mendoza), CU (Quincemil), JU (Chanchamayo), PA (Oxapampa, Puerto Bermúdez)

Parataruma Kimsey, 1982 [Leclercq 2005c]

86. *leclercqi* Kimsey, 1982: JU (Satipo)

Podagritus Spinola, 1851 [Leclercq 1999]

Subgenus: *Podagritus* Spinola, 1851

87. *aemulans* (Kohl, 1905): AR, AY, CU, JU (Jauja), LI, TA

88. *aricae* subsp. *aricae* Leclercq, 1957: JU (Jauja), TA

89. *aricae* subsp. *carrascoi* Fritz, 1971: Endemic*, CU (Cusco), JU

Subgenus: *Parechuca* Leclercq, 1970

90. *acollae* Leclercq, 1970: Endemic*, CU (Acomayo, Callanga, Chocco, Cusco, Sacsayhuaman), JU (Acolla), (=*exegetus* Leclercq, 1970)

91. *caelebs* Leclercq, 2000: Endemic*, AM (Leimebamba)

92. *cuzcosus* Leclercq, 1982: Endemic*, AR, CU (Cusco, Lucre, Pisaq, Urubamba)

93. *garcianus* Leclercq, 1982: Endemic*, CU (Cusco, Lucre, Urubamba)

94. *martini* Leclercq, 2000: *, AM (Rodríguez de Mendoza)

95. *matucanae* Leclercq, 2000: Endemic*, AM (Chachapoyas), LI (Matucana)

96. *pasconus* Leclercq, 1982: *, PA (Oxapampa)

97. *pecunius* Leclercq, 1982: AR (Arequipa), CU (Urubamba), (=*geraesae* Leclercq, 1957 *nec* 1951)

98. *picchusus* Leclercq, 1982: Endemic*, AM (Chachapoyas), CU (Machu Picchu)

99. *pius* (Strand, 1910): AM (Chachapoyas, Rodríguez de Mendoza), PA (Oxapampa), (=*geraesae* Leclercq, 1951)

100. *rhopaloides* Leclercq, 1951: LI (Matucana)

101. *subandinus* Leclercq, 1982: Endemic*, LI (Atocongo)

Quexua Pate, 1942 [Leclercq 2002a, 2005a]

102. *cashibo* Pate, 1942: *, JU (Perené), LO (Iquitos), MD (Pakitza, Tambopata), PA (Pichis, Puerto Bermúdez)

103. *inca* Leclercq, 1955: *, CU (Callanga)

104. *manuta* Leclercq, 1980: Endemic*, CU (Quincemil)

105. *nericata* Leclercq, 1980

106. *pano* Pate, 1942: *, JU, MD (Pakitza), PA (Puerto Bermúdez)

107. *ricata* Leclercq, 1955: MD (Pakitza)

108. *verticalis* (F. Smith, 1873): LO (La Sombra), MD (Pakitza), PA (Puerto Bermúdez), (=*llameo* Pate, 1942)

109. *witoto* Pate, 1942: LO (La Sombra)

Rhopalum Stephens, 1829 [Leclercq 2002b]

110. *cajanum* Leclercq, 1970: AM (Chachapoyas, Leimebamba, Río Sonche)
111. *caldaux* Leclercq, 2002: CU (Machu Picchu), PA (Oxapampa)
112. *caudinum* Leclercq, 2002: Endemic*, AM (Rodríguez de Mendoza)
113. *cumbayae* Leclercq, 2002: Endemic*, AM (Chachapoyas), CA (Cajamarca)
114. *deroanni* Leclercq, 2002: Endemic*, AM (Chachapoyas)
115. *exultatum* Leclercq, 1970: AM (Chachapoyas)
116. *faustum* Leclercq, 2002: Endemic*, AM (Rodríguez de Mendoza)
117. *grenadinum* (Pate, 1947): LI, MD (Pakitza)
118. *mycenum* Leclercq, 2002: Endemic*, AM (Rodríguez de Mendoza), HU (Tingo María)
119. *nicaraguaense* Cameron, 1905: AM (Chachapoyas), HU (Tingo María), JU (El Campamento)
120. *palmarae* Leclercq, 2002: CU (Quincemil)
121. *potosium* Leclercq, 1970: CU (Cosñipata, Quincemil), HU (Tingo María), JU (San Ramón), MD (Avispas, Pakitza)
122. *rorator* Leclercq, 2002: HU (Tingo María)
123. *rossi* Leclercq, 2002: Endemic*, HU (Tingo María)
124. *rumipambae* Leclercq, 1970: AM (Chachapoyas)
125. *rutrax* Leclercq, 2002: AM (Rodríguez de Mendoza)
126. *terzoi* Leclercq, 2002: AM (Chachapoyas)
127. *tingonum* Leclercq, 2002: Endemic*, HU (Carpish)
128. *wileyi* Leclercq, 2002: AM (Rodríguez de Mendoza)
129. *zethus* Leclercq, 2002: AM (Leimebamba)

Larrini

Larra Fabricius, 1793 [Menke 1992]

130. *altamazonica* Williams, 1928: CU, HU, JU, LO, MD (Pakitza), UC
131. *bicolor* Fabricius, 1804: HU, JU, LO, UC
132. *godmani* Cameron, 1889: CA?, HU, JU, LO, MD, UC
133. *praedatrix* (Strand, 1910): HU
134. *princeps* (F. Smith, 1851): HU

Liris Fabricius, 1804

Subgenus: *Leptolarra* Cameron, 1900
135. *inca* Amarante, 2002: Endemic*, CU (Cusco), (=*peruanus* Brèthes, 1924)
136. *plebejus* (Taschenberg, 1870)
137. *politicus* (Dalla Torre, 1897)
138. *rufipennis* Fabricius, 1804

Subgenus: *Motes* Kohl, 1897
139. *peruanus* (Brèthes, 1924): Endemic*, LI?

Tachysphex Kohl, 1883 [Pulawski 1974]

140. *inconspicuus* (W.F. Kirby, 1890): LA (Chiclayo), MD (Avispas, Pakitza), UC (Pucallpa)
141. *iridipennis* (F. Smith, 1873): JU?-MD? (Río Colorado), UC (Pucallpa)

142. peruanus Pulawski, 1986: Endemic*, LA (Lambayeque), LI (Chosica, Matucana)
143. ruficaudis (Taschenberg, 1870): LO (Iquitos), MD (Avispas)

Tachytes Panzer, 1806 [Bohart 1979]

144. amazonus F. Smith, 1856: AP (Abancay), AY (Ninabamba), CU (Limatambo, Lucre, Miravalle, Urubamba), (=*tuberculatus* Giner Marí, 1944)
145. andesae R. Bohart, 1979: *, CU (Cusco, Miravalle)
146. aurovestitus F. Smith, 1873: MD (Avispas)
147. chrysopyga subsp. *chrysopyga* (Spinola, 1841)
148. concinnus F. Smith, 1856: AY (Río Pampas), CU
149. costalis Taschenberg, 1870: HU (Tingo María), JU, UC
150. flagellarius R. Bohart, 1979: UC (Pucallpa)
151. fraternus Taschenberg, 1870
152. hades Schrottky, 1903: HU (Tingo María)
153. jucundus F. Smith, 1856: UC (Pucallpa)
154. leprieurii (Spinola, 1841): HU, LO
155. menkei R. Bohart, 1979: LO (San Antonio), UC (Yarinacocha)
156. micantipygus Strand, 1910: UC (Pucallpa)
157. pretiosus Cameron, 1912: LO
158. pubescens R. Bohart, 1979: HU (Tingo María), MD (Avispas), UC (Pucallpa)
159. rhododactylus Taschenberg, 1870: LO (Iquitos)
160. richardsi R. Bohart, 1979
161. roraimae R. Bohart, 1979: MD (Avispas)
162. schlingeri R. Bohart, 1979: Endemic*, JU (Perené)
163. simulans F. Smith, 1873: HU, JU, LI, LO, PU
164. vardyi R. Bohart, 1979: HU (Tingo María), UC (Pucallpa)

Miscophini

Lyroda Say, 1837

165. concinna (F. Smith, 1856)

Nitela Latreille, 1809

166. menkei van Zuijlen, 1994: *, LO (Iquitos)

Oxybelini

Oxybelus Latreille, 1796 [Bohart 1992, 1993ab]

167. andinus Brèthes, 1913
168. aurifrons F. Smith, 1856
169. catamarcensis (Schrottky, 1909)
170. fritzi R. Bohart, 1993: (=*modestus* Brèthes, 1913)
171. genisei R. Bohart, 1993
172. marginatus F. Smith, 1856
173. paraguayensis Brèthes, 1909
174. peruensis R. Bohart, 1993: *, HU (Tingo María)
175. peruvicus R. Bohart, 1993: *, HU (Tingo María), JU (Chanchamayo), MD (Puerto Maldonado)

176. *schlingeri* R. Bohart, 1993: LI (Chancay), LL (Moche, Trujillo)
177. *slanskyae* R. Bohart, 1993: *, HU (Tingo María)
178. *vardyi* R. Bohart, 1993: Endemic*, LA (Chiclayo), LI (Chancay, Cieneguilla, Lurín), LL (Moche)

Trypoxylini

Aulacophilus F. Smith, 1869

179. *eumenoides* Ducke, 1904: LO (Iquitos)
180. *vespoides* F. Smith, 1869

Pison Jurine *in* Spinola, 1808 [Menke 1988]

181. *arachniraptor* Menke, 1988: CU (Quincemil), HU (Monzón)
182. *aranevorax* Menke, 1988: HU (Monzón)
183. *cameronii* Kohl, 1893: MD (Avispas), UC (Pucallpa)
184. *chrysops* Menke, 1988: HU (Divisoria)
185. *conforme* F. Smith, 1869: MD (Avispas)
186. *convexifrons* Taschenberg, 1870: MD (Pakitza)
187. *cooperi* Menke, 1988: HU (Monzón), MD (Pakitza)
188. *cressoni* Rohwer, 1911: HU (Cueva de las Pavas, Monzón), JU (Chanchamayo), UC (Pucallpa)
189. *delicatum* Menke, 1988: AM (Rodríguez de Mendoza), CU (Quillabamba), HU (Tingo María), JU (Chanchamayo, San Ramón), MD (Pakitza)
190. *eremnon* Menke, 1988: HU (Pachitea), PA (Puerto Bermúdez)
191. *eu* Menke, 1988: CU (Quincemil), HU (Tingo María)
192. *gnythos* Menke, 1988: MD (Tambopata)
193. *larsoni* Menke, 1988: CU (Cosñipata)
194. *maculipenne* F. Smith, 1860: JU (El Campamento), UC (Pucallpa)
195. *pilosum* F. Smith, 1873: HU (Tingo María), PA (Puerto Bermúdez), UC (Pucallpa)
196. *spaerophallus* Menke, 1988: HU (Tingo María)
197. *styphopteron* Menke, 1988: *, CU (Quincemil), MD (Avispas)
198. *sylphe* Menke, 1988: Endemic*, CA (Cajamarca), LL (Samne)
199. *wasbaueri* Menke, 1988: MD (Pakitza)

Pisoxylon Menke, 1968

200. *xanthosoma* Menke, 1968: *, UC (Pucallpa)

Trypoxylon Latreille, 1796 [Richards 1934]

Subgenus: *Trypoxylon* Latreille, 1796

201. *oculare* Menke, 1968
202. *shannoni* Richards, 1934: Endemic*, LI (Chosica)
203. *staudingeri* Richards, 1934: Endemic*, CU (Vilcanota)

Subgenus: *Trypargilum* Richards, 1934

204. *albitarse* Fabricius, 1804: JU (Chanchamayo), (=*leucotrichium* Rohwer, 1912)
205. *bogotense* Richards, 1934: LO (Pebas)
206. *buchwaldi* Richards, 1934: PI (Piura), TU (Tumbes)
207. *emdeni* Richards, 1934: Endemic*, no locality given

208. *nattereri* Richards, 1934: LI (Lima)
209. *nitidum* subsp. *nitidum* F. Smith, 1856
210. *schnusei* Richards, 1934: Endemic*, no locality given
211. *surinamense* Richards, 1934: LO (Pebas)

Pemphredoninae
Pemphredonini
Incastigmus Finnamore, 1995 [Finnamore 2002]
212. *caelukhus* Finnamore, 2002: Endemic*, LA (Chiclayo, Olmos), PI (Piura)
213. *ceromus* Finnamore, 2002: Endemic*, CU (Aguas Calientes, Machu Picchu, Urubamba), HU (Carpish, Tingo María), PA (Oxapampa)
214. *hexagonlis* (Fox, 1897): HU (Tingo María), JU (La Merced, Paratushiali, Satipo), LO (Iquitos)
215. *ictericornis* Finnamore, 2002: *, HU (Tingo María), MD (Puerto Maldonado)
216. *inti* Finnamore, 1995: CU (Aguas Calientes, Machu Picchu, Quincemil), HU (Cayumba, Las Palmas, Magdalena, Monzón, Tingo María), JU (La Merced, Satipo), LO (Iquitos, Quistococha), MD (Puerto Maldonado, Tambopata), SM (Tocache), UC (Pucallpa)
217. *iphis* Finnamore, 2002: CU (Quillabamba, Quincemil), LO (Quistococha)
218. *kunkopteryx* Finnamore, 2002: *, CU (Machu Picchu), HU (Tingo María), JU (Chanchamayo), LO (Iquitos)
219. *mauracis* Finnamore, 2002: CU (Machu Picchu)
220. *mytior* Finnamore, 2002: *, CU (Aguas Calientes, Machu Picchu), HU (Huánuco)
221. *neotropicus* (Kohl, 1890): AP (Cuya), CU (Machu Picchu, Quincemil, Quillabamba), HU (Cueva de las Pavas, Huánuco, Monzón, Tingo María), JU (Satipo), MD (Puerto Maldonado)
222. *pyrrhopyxis* Finnamore, 2002: LO (Iquitos)
223. *trichodocerus* Finnamore, 2002: CA (Querocotillo), CU (Quillabamba), HU (Tingo María), JU (Satipo)
Llaqhastigmus Finnamore, 1995 [Finnamore 1995]
224. *jatunkirus* Finnamore, 1995: CU (Aguas Calientes, Machu Picchu), HU (Carpish, Tingo María), PA (Oxapampa)
225. *llutanis* Finnamore, 1995: Endemic*, CU (Machu Picchu)
226. *muthus* Finnamore, 1995: *, LI (Chancay, Chosica, Cupiche, Lima, San Bartolomé, Surco), LL (Samne)
227. *nigricollaris* Finnamore, 1995: HU (Carpish, Tingo María)
228. *sapanis* Finnamore, 1995: *, CU (Machu Picchu)
229. *shachus* Finnamore, 1995: *, HU (Huánuco)
Microstigmus Ducke, 1907
230. *puncticeps* Melo & Matthews, 1997: LO (Iquitos)
Spilomena Shuckard, 1838
231. *catamarca* Antropov, 1992

232. *peruensis* Dollfuss, 1982: *, CU (Urubamba)
233. *rossi* Antropov, 1993: Endemic*, HU (Tingo María)
234. *schlingeri* Antropov, 1993: *, HU (Huánuco)
235. *spinosa* Antropov, 1992: Endemic*, JU (Perené)

Stigmus Panzer, 1804

236. *nigricoxis* Strand, 1911: Endemic* (Ecuador instead?)

Psenini

Pluto Pate, 1937 [van Lith 1979]

237. *denticollis* van Lith, 1979: Endemic*, no locality given
238. *marthae* van Lith, 1979: HU (San Jorge, Tingo María, Yurac), LO (San Antonio), PA (Puerto Bermúdez), UC (Pucallpa, Yarinacocha)
239. *nitens* van Lith, 1979: CU (Quincemil), HU (Monzón, Tingo María, Yurac), MD (Manú), PA (Puerto Bermúdez)
240. *occipitalis* van Lith, 1979: Endemic*, LO (San Antonio)
241. *pygmaeus* subsp. *pygmaeus* (Brèthes, 1913): HU (Tingo María), MD (Avispas)
242. *rufanalis* van Lith, 1979: Endemic*, LI (Chancay), PI (Pariñas, Piura)
243. *townsendi* (Cockerell, 1911): PI (Piura)
244. *trilobatus* van Lith, 1979: MD (Avispas)

Psen Latreille, 1796 [van Lith, 1975]

245. *metallicus* van Lith, 1975: Endemic*, JU (Chanchamayo)

Pseneo Malloch, 1933 [van Lith, 1975]

246. *aureolus* (van Lith, 1975): CU (Cosñipata), HU (Previsto, Tingo María)
247. *auriger* (van Lith, 1975): *, CU (Tambo), UC (Pucallpa)
248. *auriventris* (van Lith, 1975): Endemic*, JU (Chanchamayo)
249. *calicus* (van Lith, 1975): Endemic*, CU (Tambo)

Philanthinae

Cercerini

Cerceris Latreille, 1802

250. *binodis* Spinola, 1841
251. *carrascoi* Fritz & Toro, 1974: Endemic*, CU (Lucre, Miravalle, Ollantaytambo, Urubamba)
252. *duplicata* Brèthes, 1910: LA, LI [identifications by GR Ferguson]
253. *garleppi* Schrottky, 1911: Endemic*, CU
254. *intricata* subsp. *graphica* F. Smith, 1873: LI [identifications by GR Ferguson]
255. *manca* Fritz & Mariluis, 1979: LI [identifications by GR Ferguson]
256. *tingi* Fritz & Mariluis, 1977: Endemic*, HU (Tingo María)

Philanthini

Trachypus Klug, 1810 [Rubio-Espina 1975]

257. *caenosus* Rubio-Espina, 1975: *, CU (Quincemil), HU (Monzón)
258. *cisminutus* Rubio-Espina, 1975: Endemic*, HU (Monzón), JU (Chanchamayo), MD (Avispas)

259. elongatus (Fabricius, 1804): HU (Monzón, Tingo María), JU (Perené)
260. peruviensis Rubio-Espina, 1975: Endemic*, MD (Avispas)
261. petiolatus (Spinola, 1841): LI (Chosica, Lima), (=*peruanus* Giner Marí, 1944)
262. spegazzinii Brèthes, 1910: no locality given

Sphecidae

See introduction for Crabronidae.

Ammophilinae

Ammophila W.F. Kirby, 1798 [Menke 2004]
263. laeviceps F. Smith, 1873: (=*chilensis* Reed, 1894)
264. lampei Strand, 1910: CU, PU, (=*peruvianus* Rohwer, 1913)
265. rufipes Guérin-Méneville, 1831: LA (Lambayeque), LI (Callao, Cañete, Chosica, Lima), LL (Trujillo), (=*variolosa* Giner Marí, 1944, =?*arenaria* Cabrera la Rosa, 1993 *nomen nudum*)
Eremnophila Menke, 1964
266. opulenta (Guérin-Méneville, 1838): MD (Pakitza)

Chloriontinae

Chlorion Latreille, 1802 [Menke & Willink 1964]
267. mirandum (Kohl, 1890): AM (Santiago), UC (Ucayali)

Sceliphrinae

Chalybion Dahlbom, 1843
268. californicum (de Saussure, 1867): LI
Dynatus Lepeletier de Saint Fargeau, 1845 [Kohl 1902]
269. nigripes subsp. *nigripes* (Westwood, 1832): JU
Penepodium Menke in Bohart & Menke, 1976 [Kohl 1902]
270. gorianum (Lepeletier de Saint Fargeau, 1845)
271. haematogastrum (Spinola, 1851)
272. mocsaryi (Kohl, 1902)
273. princeps (Kohl, 1902)
274. romandinum (de Saussure, 1867)
Podium Fabricius, 1804 [Kohl 1902]
275. denticulatum F. Smith, 1856
276. kohlii Zavattari, 1908
277. plesiosaurus (F. Smith, 1873): MD (Puerto Maldonado)
Sceliphron Klug, 1801 [van der Vecht & van Breugel 1968]
Subgenus: *Sceliphron* Klug, 1801
278. asiaticum (Linnaeus, 1758)
279. caementarium (Drury, 1773): LI, PI (Sullana)

280. fistularium (Dahlbom, 1843): JU (Satipo), LI, LO (Yurimaguas), PI (Sullana), UC (Pucallpa)

Trigonopsis Perty, 1833 [Vardy 1978]

281. cooperi Vardy, 1978: HU (Tingo María)
282. menkei Vardy, 1978: LO (Iquitos)
283. neotropica Vardy, 1978: *, HU (Tingo María)
284. richardsi Vardy, 1978: *, JU (Satipo), SM (Moyobamba), UC (Pucallpa)
285. rufiventris (Fabricius, 1804): HU (Cayumba, Pachitea), JU (Chanchamayo, El Campamento, Satipo), LO (Iquitos, San Roque, Tapiche, Yurimaguas), MD (Pakitza), UC (Atalaya, B Abad, Pucallpa)
286. schunkei Vardy, 1978: LO (San Roque), UC (Pucallpa)
287. succinea Vardy, 1978: UC (Pucallpa)
288. violascens (Dalla Torre, 1897): AM (Santiago), CU (Cosñipata), HU (Pachitea, Previsto, Tingo María), JU (Chanchamayo), MD (Pakitza)

Sphecinae

Isodontia Patton, 1880

289. costipennis (Spinola, 1851): (=*cyanipennis* Fabricius, 1793)
290. dolosa (Kohl, 1895)

Prionyx Vander Linden, 1827

291. chilensis (Spinola, 1851)
292. erythrogastra (Rohwer, 1913): *, CU (Cusco)
293. herrerai (Brèthes, 1926): Endemic*, CU (Cusco)
294. neoxenus (Kohl, 1890): AR (Arequipa), LI (La Molina), PU, (=*omissus* Kohl, 1890, =*nigricapillus* Berland, 1926)
295. pseudostriatus (Giner Marí, 1944): Endemic*, LI, (=*vaqueroi* Giner Marí, 1944)
296. thomae (Fabricius, 1775): LI

Sphex Linnaeus, 1758

Subgenus: *Sphex* Linnaeus, 1758
297. caliginosus Erichson, 1849
298. dorsalis Lepeletier de Saint Fargeau, 1845: AP, AY, HU
299. ichneumoneus (Linnaeus, 1758): LI (Lima)
300. latro Erichson, 1849
301. peruanus Kohl, 1890: AN, AR (Arequipa), LI (Lima), PU

The Chrysidoid Families

Bethylidae

The species of Bethylidae are listed by Gordh and Móczár (1990). Keys to some of the Peruvian species of Bethylidae are found in Evans (1964), with additional references as listed for each genera. Terayama (2003) presented a key to most known genera of the

world, while Azevedo in Hanson and Gauld (2006) and Vargas-Rojas and Terayama in Fernández and Sharkey (2006) provided keys for the Neotropical genera.

Bethylinae

Goniozus Förster, 1856 [Evans 1964]

302. peruvianus (Kieffer, 1910): Endemic*, HU (Pachitea)

Epyrinae

Cephalonomiini

Cephalonomia Westwood, 1833 [Evans 1964]

303. hyalinipennis Ashmead, 1893: Found in most of the USA to South America, probably present in Peru

Epyrini

Anisepyris Kieffer, 1905 [Evans 1966a]

304. bifidus Evans, 1966: HU (Monzón)
305. bogotensis (Kieffer, 1910): Found in Ecuador and Bolivia, probably present in Peru
306. franciscanus Evans, 1966: JU (El Campamento)
307. inca Evans, 1966: *, CU (Quincemil)
308. penai Evans, 1966: *, LO (La Sombra), MD (Avispas)
309. peruvianus (Kieffer, 1910): *, CU (Vilcanota)

Aspidepyris Evans, 1964

310. austrinus Evans, 1967: Found in Ecuador and Bolivia, probably present in Peru

Bakeriella Kieffer, 1910 [Evans 1964, 1966c, 1979, Azevedo *et al.* 2005]

311. depressa Kieffer, 1910: *, CU (Marcapata)
312. inca Evans, 1964: *, HU (Monzón), PA (Puerto Bermúdez)
313. montivaga (Kieffer, 1910): *, CU (Cajón, Cosñipata, Marcapata), HU (Pachitea)
314. polita Evans, 1964: CU (Cosñipata, Marcapata), HU (Monzón, Tingo María)
315. quinquepartita (Kieffer, 1910): Endemic*, CU (Marcapata)
316. reclusa (Evans, 1969): Found in Ecuador and Bolivia, probably present in Peru
317. rossi Evans, 1964: HU (Tingo María)
318. subcarinata Evans, 1966: Endemic*, CU (Quincemil), HU (Tingo María)

Epyris Westwood, 1832 [Evans 1969c]

319. flavicrus Kieffer, 1910: *, CU (Marcapata), HU (Monzón, Tingo María)
320. isthmicus Evans, 1969: LO (Putumayo)
321. marcapata Evans, 1969: *, CU (Quincemil)
322. montivagus Kieffer, 1910: *, CU (Cajón, Cosñipata, Marcapata), HU (Monzón, Pachitea), MD (Avispas), PA (Dos de Mayo)
323. schlingeri Evans, 1969: Endemic*, HU (Monzón)

324. subspinosus Kieffer, 1910: Found in Ecuador and Bolivia, probably present in Peru

Holepyris Kieffer, 1905 [Evans 1977]

325. micidus Evans, 1977: JU (Perené), LI (Lima)

Rhabdepyris Kieffer, 1904 [Evans 1965a, Stein & Azevedo 2007]

326. callosus Stein & Azevedo, 2007: Endemic*, LO (Iquitos)

327. demissus Stein & Azevedo, 2007: Endemic*, MD (Panticolla)

328. minutulus Evans, 1965: Endemic*, no locality given

329. muesebecki Evans, 1966: Found in Ecuador and Bolivia, probably present in Peru

330. muscarius (Westwood, 1874): CU

331. peruvianus Kieffer, 1910: Endemic*, CU (Vilcanota)

332. septemlineatus Kieffer, 1906: MD (Pakitza, Panticolla)

333. virescens Evans, 1965: HU (Pachitea)

Sclerodermini

Sclerodermus Latreille, 1809 [Evans 1964, 1968a]

334. macrogaster (Ashmead, 1887): Found in Ecuador and Bolivia, probably present in Peru

Pristocerinae

Dissomphalus Ashmead, 1893 [Alencar & Azevedo 2006, 2008, Azevedo 1999, 2001, 2003]

335. divaricatus Alencar & Azevedo, 2008: *, LO (Iquitos)

336. falciformis Azevedo, 2001: HU (Tingo María)

337. filus Azevedo, 2003: CU (Quincemil)

338. forceps Alencar & Azevedo, 2008: MD (Avispas)

339. hemisphaericus Azevedo, 2003: LO (Iquitos)

340. largimanus Azevedo, 2001: CU (Quillabamba)

341. longipilosus Azevedo, 2001: *, MD (Puerto Maldonado)

342. mandibulatus Azevedo, 2003: HU (Tingo María)

343. megomphalus Evans, 1969: PA (Puerto Bermúdez)

344. montanus (Kieffer, 1910): Endemic*, CU (Cosñipata)

345. napo Evans, 1979: LO (Iquitos)

346. plaumanni Evans, 1964: CU (Alto Sambaray)

347. punctatus (Kieffer, 1910): *, CU (Cajón), LO (Iquitos, Varillal)

348. scavatus Azevedo, 1999: CU (Quillabamba), JU (Satipo), MD (Puerto Maldonado)

349. signatus Alencar & Azevedo, 2008: *, HU (Tingo María)

350. sinatus Alencar & Azevedo, 2006: HU (Tingo María), JU (Satipo)

351. subtriangularis Azevedo, 2001: MD (Puerto Maldonado)

352. tetracerutus Azevedo, 2001: CU (Quillabamba), HU (Tingo María), SM (Tocache)

353. uber Alencar & Azevedo, 2006: HU (Tingo María)

Parascleroderma Kieffer, 1904 [Evans 1967a]

354. pucallpa Evans, 1967: Endemic*, UC (Pucallpa)

Pristocera Klug, 1808, (=*Apenesia* Westwood, 1874) [Evans 1963, 1966b]

355. bugabensis (Cameron, 1888): HU (Tingo María)

356. cusco Evans, 1966: Endemic*, CU (Machu Picchu)

357. inca Evans, 1963: *, HU (Pachitea, Tingo María), MD (Avispas), PA (Dos de Mayo)

358. neotropica Evans, 1963: JU (Perené)

359. nitida (Kieffer, 1910): *, CU (Cosñipata, Quincemil), HU (Tingo María)

360. peruana Evans, 1963: *, CU (Marcapata, Quincemil), JU (El Campamento), (=*punctatus* Kieffer, 1910)

361. truncaticeps (Kieffer, 1910): HU (Tingo María)

Pseudisobrachium Kieffer, 1904 [Evans 1964, 1966b, Azevedo 2008]

362. angulatum Evans, 1964: Endemic*, LO (Iquitos)

363. crassicornis (Westwood, 1874)

364. distans (Kieffer, 1910): Endemic*, CU (Cosñipata)

365. porteri Evans, 1966: *, CU (Machu Picchu), HU (Tingo María)

Chrysididae

Key to world genera and species list is provided by Kimsey and Bohart (1990) and generic key for the Neotropical region by Kimsey in Fernández and Sharkey (2006).

Amiseginae

Adelphe Mocsáry, 1890 [Kimsey 2008]

366. leuropos Kimsey, 2008: LO

367. ?*metallica* (Kieffer, 1910)

Amisega Cameron, 1888 [Kimsey 1990]

368. sp/spp.

Chrysidinae

Chrysidini

Caenochrysis Kimsey & Bohart, 1981 [Linsenmaier 1984]

369. amazonica (Mocsáry, 1889), "*tridens*-group"

370. apposita (Linsenmaier, 1984), "*armata*-group"

371. crotonis (Ducke, 1907): JU (Chanchamayo), (=*linigera* Linsenmaier, 1984), "*armata*-group"

372. extera (Linsenmaier, 1984), "*tridens*-group"

373. imminenta (Linsenmaier, 1984), "*tridens*-group"

374. limaca (Linsenmaier, 1984): Endemic*, LI, "*pumilla*-group"

375. mathani (Ducke, 1907), "*cyanea*-group"

376. mucronata (Brullé, 1846), "*tridens*-group"

377. *parvula* (Fabricius, 1804): CU (Vilcanota), HU (Cordillera Azul), (=*peruensis* Mocsáry, 1914, =*chrysofascialis* Linsenmaier, 1984), "*tridens*-group"
378. *quadriramosa* (Mocsáry, 1911): *, CU (Vilcanota), "*armata*-group"
379. *silvestrii* subsp. *silvestrii* (Ducke, 1904), "*silvestrii*-group"
380. *silvestrii* subsp. *garciai* (Linsenmaier, 1984): Endemic*, HU (Iparía), "*silvestrii*-group"
381. *taschenbergi* (Mocsáry, 1889), "*cyanea*-group"

Chrysis Linnaeus, 1761 [Bohart 1985a, Linsenmaier 1987]

382. *alta* R. Bohart, 1985: Endemic*, CU (Cusco), "*comparata-gibba*-group"
383. *atrypa* R. Bohart, 1985: Endemic*, LI (Chosica, Palle), SM (Tarapoto), "*comparata-gibba*-group"
384. *brachypyga* Ducke, 1911: "*intricata*-group" or "*smaragdula*-group"
385. *crista* R. Bohart, 1985: *, CU (Cusco), LI (Matucana, Palle), "*comparata-gibba*-group"
386. *grandis* Brullé, 1846: AN, JU, LI, PU, "*grandis*-group"
387. *laevimarginata* Linsenmaier, 1987: Endemic*, "*grandis*-group"
388. *paraguayensis* (Bischoff, 1910): LI, "*intricans*-group"
389. *peruvica* R. Bohart, 1985: *, LL (Simbal), "*comparata-gibba*-group"
390. *rohweriana* R. Bohart, 1990: *, CU (Ollantaytambo), (=*rugosa* Rohwer, 1913), "*grandis*-group"

Exochrysis R. Bohart, 1966 [Kimsey 1985, Linsenmaier 1985]

391. *spinigera* (Spinola, 1838)

Ipsiura Linsenmaier, 1959 [Bohart 1985b, Linsenmaier 1985]

392. *affinissima* (Ducke, 1903)
393. *covillei* R. Bohart, 1985
394. *friesiana* (Ducke, 1902)
395. *genbergi* (Dahlbom, 1854)
396. *klugi* (Dahlbom, 1854)
397. *leucocheiloides* (Ducke, 1903)
398. *ulconota* (Linsenmaier, 1985): Endemic*, HU (Tingo María)

Neochrysis Linsenmaier, 1959 [Kimsey 1985, Linsenmaier 1985]

399. *cameroni* (du Buysson, 1900): HU (Tingo María), JU, (=*striafoveata* Linsenmaier, 1985)
400. *insuturalis* Linsenmaier, 1985

Pleurochrysis R. Bohart, 1966 [Kimsey 1985, Linsenmaier 1985]

401. *imbecilla* (Mocsáry, 1889)
402. *leucophris* (Mocsáry, 1889)
403. *limaca* (Linsenmaier, 1985): Endemic*, LI (Lima)
404. *peruana* (Linsenmaier, 1985): Endemic*, JU (Huancayo)

Elampini

Hedychrum Latreille, 1802

405. *ecuadoricum* Mocsáry, 1911: Probably present in northern Peru, found in Guayaquil (Ecuador)

Holophris Mocsáry, 1890
406. albolimbatus (Ducke, 1908)
407. minutissimus (Brèthes, 1903)
408. punctatifrons (Bischoff, 1910)
Holopyga Dahlbom, 1845
409. luzulina Dahlbom, 1854:

Cleptinae
Cleptidea Mocsáry, 1904 [Móczár 1996]
410. mima Kimsey, 1986: Endemic*, HU (Tambello Chica)
411. krombeini Móczár, 1996: Endemic*, JU (Chanchamayo)

Dryinidae

The revision of Olmi (1984) included descriptions and keys for all known species. Additional references listed below provide updated keys and descriptions of further Peruvian taxa. Olmi *et al.* (2000) presented a checklist for all Neotropical species. Olmi and Virla in Fernández and Sharkey (2006) provided illustrated keys to the genera.

Anteoninae
Anteon Jurine, 1807 [Olmi 1989, Olmi 1996b]
412. albitarse (Cameron, 1888): Found in Ecuador and Bolivia, probably present in Peru
413. amazonicum Olmi, 1996: Endemic*, LO (Iquitos, Varillal)
414. gracile Olmi, 1989: *, MD (Puerto Maldonado)
415. huggerti Olmi, 1989: *, JU (Satipo)
416. minusculum Olmi, 1987
417. panamense Olmi, 1984: MD (Puerto Maldonado)
418. pilicorne Ogloblin, 1938: CU (Machu Picchu), (=*mexicanum* Olmi, 1984)
Deinodryinus R.C.L. Perkins, 1907 [Olmi 1987, 1989, 1992b, 2001]
419. amoenus Olmi, 1984
420. bicolor (Olmi & Currado, 1979): CU (Quincemil)
421. costaricanus Olmi, 1987
422. cuzcanus Olmi, 1984: *, CU (Quincemil)
423. elegans Olmi, 1984
424. finnamorei Olmi, 1989: Endemic*, MD (Puerto Maldonado)
425. fluviatilis Olmi, 1984: MD (Tambopata) [Olmi 2001]
426. huggerti Olmi, 1989: *, CU (Quillabamba)
427. inermis Olmi, 1984
428. insanus Olmi, 1989: *, CU (Quillabamba)
429. maximus Olmi, 1984: HU (Monzón)
430. nigrolobatus Olmi, 1984: CU (Machu Picchu)

431. *noyesi* Olmi, 1984
432. *panamensis* Olmi, 1984
433. *perlucens* Olmi, 1984: *, CU (Marcapata), MD (Avispas)
434. *peruvianus* Olmi, 1984: *, HU (Tingo María)
435. *pseudobilobus* Olmi, 1984: SM
436. *pseudoinermis* Olmi, 1987: HU (Tingo María)
437. *reali* Olmi, 1992
438. *schlingeri* Olmi, 1984: Endemic*, HU (Monzón)
439. *vagans* Olmi, 1984

Aphelopinae

Aphelopus Dalman, 1823 [Olmi 1989, Olmi 1996b (key)]
440. *diffusus* Olmi, 1984
441. *leucopus* Kieffer, 1906
442. *surinamensis* Olmi, 1984: JU (Satipo)
443. *trinitatis* Olmi, 1984

Crovettia Olmi, 1984 [Olmi 1996b]
444. *barbara* Olmi, 1984
445. *huggerti* Olmi, 1996: *, LO (Iquitos)
446. *plaumanniana* Olmi, 1984

Dryininae [Olmi 1993 (key to genera)]

Dryinus Latreille, 1804, (=*Alphadryinus* Olmi, 1984, =*Tridryinus* Kieffer, 1913)
447. *argentinus* Olmi, 1984: Found in Ecuador and Bolivia, probably present in Peru
448. *flavoniger* Olmi, 1984
449. *gibbosus* (Olmi, 1984): HU (Monzón)
450. *loretanus* Olmi, 2008: *, LO
451. *pegnai* (Olmi, 1984): *, CU (Quincemil)
452. *quechuanus* (Olmi, 1984)
453. *ruficauda* (Richards, 1953)
454. *ruficeps* Cameron, 1888: CU (Quincemil), HU (Monzón)
455. *surinamensis* Olmi, 1984: LO (San Antonio)

Megadryinus Richards, 1953 [Olmi 1993 (key)]
456. *pulawskii* Olmi, 1993: *, MD (Infierno)

Gonatopodinae [Olmi 1993 (key to genera)]

Gonatopus Ljungh, 1810, (=*Donisthorpina* Richards, 1939, =*Pseudogonatopus* R.C.L. Perkins, 1905) [Olmi 1987, 1989, 1992a, 1998]
457. *breviforceps* Kieffer, 1904: MD (Piedras)
458. *campbelli* Olmi, 1984
459. *chilensis* (Olmi, 1989)
460. *drifti* (Olmi, 1989): CU (Machu Picchu)

461. huggerti Olmi, 1992: *, MD (Puerto Maldonado)
462. krombeini Olmi, 1998: Endemic*, LA (Chiclayo, Tumán)
463. larsensis Olmi, 1993: Endemic*, MD (Puerto Maldonado)
464. malkini (Olmi, 1989): Endemic*, CU (Machu Picchu)
465. neotropicus (Olmi, 1986)
466. nigrithorax (Ogloblin, 1953): CU
467. peruvianus Olmi, 1984: Endemic*, HU (Monzón)
468. regalis Olmi, 1987: Endemic*, CU (Machu Picchu)

Neodryinus R.C.L. Perkins, 1905
469. peruvianus Olmi, 1984: *, UC (Pucallpa)
470. incaicus Olmi, 1984: HU (San Jorge)

Trichogonatopus Kieffer, 1909
471. raptor (Fenton, 1927): HU (Monzón)

Embolemidae

Two genera (*Embolemus* Westwood, 1833 and *Ampulicomorpha* Ashmead, 1893) are reported from the Neotropical region. Species are revised by Olmi (1996a, 1997ab, 1999) and Amarante *et al.* (1999).

Embolemus Westwood, 1833
472. subtilis Olmi, 1996: CU (Machu Picchu)

Plumariidae

This is a small family with three South American genera known from Ecuador to Chile and Argentina (Diez *et al.* 2007). Roig-Alsina (1994), Hanson and Gauld (2006), and Fernández and Sharkey (2006) presented a key to the Neotropical genera of the family. Nagy (1973) provided keys for several of the southern Neotropical species. Evans (1966d) and Bradley (1972) recorded the family from Peru.

Plumarius Philippi, 1873
473. cf. *niger* Philippi, 1873: LI (Chosica, Pativilca)

Sclerogibbidae

The only Neotropical genus of the family is *Probethylus* Ashmead, 1902, which is known from USA and south to Brazil and Argentina (Richards 1939, Shetlar 1973, Argaman 1988, Fernández *et al.* 1996, Penteado and Achterberg 2002, Olmi 2004). The latter two references include a key to the known species.

Probethylus Ashmead, 1902

474. *callani* Richards, 1939: HU (Las Palmas, Tingo María, Yurac), JU (San Ramón), LI (Cañete, Chilca, Lachay), LL (Otuzco), MD (Puerto Maldonado), UC (Pucallpa, Yarinacocha)

475. *schwarzi* Ashmead, 1902: LA (Olmos)

Scolebythidae

Two extant South American species are known from Brazil and Colombia, *Clystopsenella longiventris* Kieffer, 1911 and *Dominibythus strictus* Azevedo, 1999 (Azevedo 1999 (including key to species of the world), Fernández *et al.* 2002, Cambra and Azevedo 2003). Laime (1997) reported one unidentified genus and species from Peru (confirmed).

"Scolebythidae"

476. sp.

The Vespoid Families

Bradynobaenidae

Genise (1986) and Hanson and Gauld (2006) presented a generic key. Nonveiller (1990) listed the species but recorded none from Peru, although *Thyphoctoides* Brothers, 1974 is found in neighboring Bolivia.

Mutillidae

Peruvian species were listed by Nonveiller (1990) and Quintero and Cambra (1996). Quintero and Cambra (1996) and Brothers in Fernández and Sharkey (2006) presented a generic key. Undescribed Peruvian species listed below are from Quintero and Cambra (1996).

Mutillinae

Ephutini

Ephuta Say, 1836 [Mickel 1952]

Subgenus: *Ephuta* Say, 1836 [20 undescribed spp. in Peru]

477. *abadia* (Cresson, 1902): LO (Explorama), MD (Pakitza)

478. *argentula* (Dalla Torre, 1897): UC (Pucallpa)

479. *birigua* Casal, 1969: LO (Explorama)

480. *cronopia* Casal, 1970: MD (Pakitza)

481. *egeria* Mickel, 1952: LO (Explorama), MD (Pakitza)
482. *elvina* Mickel, 1952: MD (Pakitza)
483. *emarginata* Mickel, 1952: MD (Tambopata)
484. *erichtho* Mickel, 1952: MD (Pakitza)
485. *flavidens* Mickel, 1952: MD (Pakitza, Tambopata)
486. *fugax* (F. Smith, 1879): MD (Pakitza)
487. *inca* Suárez, 1970: PI (Sullana)
488. *indiscreta* Mickel, 1952: MD (Pakitza)
489. *peruviana* (André, 1905): CU (Vilcanota)
490. *trifida* (Gerstäcker, 1874): LO (Explorama), MD (Pakitza)
491. *viata* Casal, 1968: AM (Marañón), HU (Tingo María)
Subgenus: *Ephuseabra* Casal, 1968
492. *morra* Casal, 1968: MD (Pakitza)
Subgenus: *Ephutopsis* Ashmead, 1904
493. *championi* (Cameron, 1894): JU (Chanchamayo), HU (Previsto, Sinchona)
494. *singularis* (Spinola, 1841): HU (Yanayacu), LO (Explorama), MD (Pakitza)
495. *solitaria* (F. Smith, 1879): MD (Pakitza)
496. *vindex* (F. Smith, 1879): MD (Pakitza, Tambopata)

Mutillini

Timulla Ashmead, 1899 [Mickel 1938] [1 undescribed sp. in Peru]

497. *brancoensis* Mickel, 1938: LO (Explorama), MD (Pakitza)
498. *cordillera* Mickel, 1938: HU (Iparía, Pachitea), LO (Explorama), MD (Pakitza), PA (Puerto Bermúdez), SM (Juanjuí), (=*mulfordi* Mickel, 1938)
499. *hedone* Mickel, 1938: CU (Cusco), LI (Callao, Chosica, Lima, Lurín, Vista Alegre), LL (Pacasmayo, Trujillo), (=*inca* Mickel, 1938)
500. *manga* (Cresson, 1902): JU (Chanchamayo)
501. *sieberi* Mickel, 1938: LO (Explorama)

Sphaeropthalminae

Atillum André, 1903 [Mickel 1943]

502. *blandulum* Mickel, 1943: CU (Sicuani), (?=*limbatum* Mickel, 1943)
503. *optabile* Mickel, 1943
504. *rubriceps* (Schrottky, 1902)

Dasymutilla Ashmead, 1899 [Manley & Pitts 2007]

505. *blattoserica* (Kohl, 1882): *, LA (Motupe), LI (Atocongo, Chillón, Chontay, Lima, Puruchuco), LL (San Pedro de Lloc), PI (Sullana), TU (Tumbes)
506. *homochroma* Suárez, 1970: Endemic*, PI ([San Miguel de] Piura), TU (Tumbes), (?=*peruviana* Suárez, 1970)
507. *peruviana* Suárez, 1970: Endemic*, PI ([San Miguel de] Piura), (?=*homochroma* Suárez, 1970)

Euspinolia Ashmead, 1903 [Suárez 1970]

508. *krombeini* Casal, 1964: PI (Sullana)
509. *rufula* Mickel, 1938: LI (Chosica, Verrugas)

Hoplocrates Mickel, 1937 [Mickel 1941]

510. *admiranda* Mickel, 1941: AM (Santiago), HU (Huallaga), LO (Explorama, Iquitos)
511. *armata* (Klug, 1802): MD (Pakitza)
512. *buccata* Mickel, 1941: LO (Explorama, Iquitos, Itaya)
513. *centromaculata* (Cresson, 1902): SM (Juanjuí)
514. *compar* Mickel, 1945: HU (Tingo María), JU (Chanchamayo)
515. *moneta* (Gerstäcker, 1874): JU (Chanchamayo)
516. *oblectanea* Mickel, 1941: LO (Explorama)
517. *rufonotata* subsp. *rufonotata* (André, 1906): CU (Marcapata), HU (Huallaga), SM (Moyobamba)
518. *spinigula* Mickel, 1941: CU (Callanga)
519. *ucayalia* Schuster, 1952: HU (Huallaga), LO (Tapiche)

Hoplomutilla Ashmead, 1899 [Mickel 1939a, 1939b]

520. *approximata* subsp. *approximata* Mickel, 1939: HU (Pachitea), LO (Explorama, Yurimaguas), SM (Mishollo)
521. *approximata* subsp. *huallaga* Schuster, 1951
522. *conspecta* Mickel, 1939: LO (Iquitos)
523. *euryale* subsp. *contigua* Schuster, 1951
524. *euryale* subsp. *euryale* Mickel, 1939: MD (Pakitza, Tambopata)
525. *lanicia* Mickel, 1939: MD (Pakitza)
526. *patricialis* (Gerstäcker, 1874)
527. *peruviana* (André, 1906): CU (Vilcanota), MD (Pakitza)
528. *phorcys* Mickel, 1939: HU (Tingo María), JU (Chanchamayo, La Merced, Satipo)
529. *rapax* Mickel, 1939: HU (Pachitea), LO (Explorama, Iquitos, Yurimaguas), SM (Juanjuí)
530. *rohweri* Mickel, 1939: CU (Callanga, Santa Ana), HU (Iparía), JU (Chanchamayo, San Luis de Shuaro, Satipo), PA (Pozuzo), SM (Mishollo, Tarapoto), (=*peruvianus* Rohwer, 1913)
531. *sociata* (F. Smith, 1879): CU (Marcapata), JU (Chanchamayo, La Merced), MD (Pakitza), PA (Pozuzo)
532. *superba* subsp. *superba* (Gerstäcker, 1874): JU (Satipo), LO (Explorama), UC (Pucallpa)
533. *valeria* Casal, 1961: LO (Explorama)

Limaytilla Casal, 1964 [1 undescribed sp.]

534. sp/spp.: AR (Cháparra)

Lomachaeta Mickel, 1936 [1 undescribed sp.]

535. sp/spp.: MD (Pakitza)

Lophomutilla Mickel, 1952, (=*Paramutilla* Mickel, 1973) [1 undescribed sp. in Peru]

536. *bucki* Suárez, 1962: MD (Pakitza)
537. *denticulata* (F. Smith, 1855): HU (Tingo María), (=*suarezi* Fritz & Pagliano, 1993)

538. inca Fritz & Pagliano, 1993: HU
539. mocajuba Casal, 1961: LO (Explorama)
540. ophomuti Fritz, 1990: HU (Tingo María)
541. staphyloma (Gerstäcker, 1874): LO (Explorama), MD (Pakitza)

Lophostigma Mickel, 1952 [Mickel 1952]
542. acanthophora (Dalla Torre, 1897)
543. alopha Mickel, 1952: LO (Explorama)
544. simoni (du Buysson, 1892): MD (Pakitza)

Pappognatha Mickel, 1939 [Mickel 1939c, Quintero & Cambra 2005]
545. limes Mickel, 1939: PA (Pozuzo)
546. obliqua Mickel, 1939
547. peruana Quintero & Cambra, 2005
548. speciosa Mickel, 1939: HU (Tingo María), LO (Pacaya-Samiria, Yurimaguas), MD (Pakitza)

Pertyella Mickel, 1952 [5 undescribed spp. in Peru]
549. sp/spp.

Pseudomethoca Ashmead, 1896, (=*Sphinctopsis* Mickel, 1928) [17 undescribed spp. in Peru]
550. credula (Cresson, 1902): LO (Explorama), MD (Pakitza, Puerto Maldonado)
551. piura (Casal, 1970): LO (Explorama), MD (Pakitza), PI (Piura)

Sphaeropthalma Blake, 1871, (=*Photopsis* Blake, 1886) [1 undescribed sp. in Peru]
552. lenis André, 1908: CU (Vilcanota)

Traumatomutilla André, 1901 [Mickel 1952] [5 undescribed spp. in Peru]
553. angustata (André, 1906): LO (Explorama), MD (Cocha Cashu, Pakitza)
554. dubia subsp. *albata* (F. Smith, 1879): MD (Pakitza)
555. fascinata (F. Smith, 1879)
556. graphica (Gerstäcker, 1874): MD (Pakitza)
557. incerta (Spinola, 1841): JU (Chanchamayo), LO (Explorama), MD (Pakitza), PA (Oxapampa), (=*weyrauchi* Mickel, 1945)
558. indicoides Mickel, 1945: JU (Chanchamayo, Huacapistana, Oreja de Capelo), UC (Pucallpa)
559. simulatrix (F. Smith, 1879): MD (Pakitza), UC (Pucallpa)
560. sodalicia (Kohl, 1882)
561. vitelligera (Gerstäcker, 1874): PI ([San Miguel de] Piura, Sullana)

Vianatilla Casal, 1962 [1 undescribed sp.]
562. sp/spp.: MD (Pakitza)

Xystromutilla André, 1905 [Cambra & Quintero 2004]
563. hansoni Cambra & Quintero, 2004: Endemic*, AP (Cuya)
564. mansueta (F. Smith, 1879): HU (Tingo María), (=*tingoensis* Fritz, 1992)
565. marginipennis (F. Smith, 1879): HU (Tingo María)

Pompilidae

Generic keys can be found in Evans (1966e) for Pompilinae and Ctenocerinae and in Bradley (1944) and Banks (1944) for some additional groups. Fernández in Fernández and Sharkey (2006) provided an illustrated key for all Neotropical genera of Pompilidae except Pepsini. Shimizu (1996) and Pitts *et al.* (2006) reconstructed higher level phylogeny. Banks (1946, 1947) listed many new records for Peru but a number of *Pepsis* were misidentified (cf. Vardy 2000, 2002, 2005). Species of *Pepsis* erroneously reported from Peru include *amyntas* Mocsáry, 1885; *atripennis* Fabricius, 1804; *decorata* Perty, 1833; *nitida* Lepeletier de Saint Fargeau, 1845 (=*andina* Brèthes, 1908, =*lassonis* Lucas, 1919); *smaragdina* Dahlbom, 1843 (=*thalia* Brèthes, 1908); *thoreyi* Dahlbom, 1845; *viridisetosa* Spinola, 1841. Furthermore, most Neotropical taxa were listed by Fernández (2000).

Ceropalinae

Ceropales Latreille, 1796 [2 spp.: MD (Pakitza)] [Rohwer 1913, Móczár 1990, Cambra 1993]

Subgenus: *Bifidoceropales* Priesner, 1969

566. *abdominalis* Taschenberg, 1869: LO, UC (Pucallpa)
567. *cubensis* subsp. *cooperi* Móczár, 1990: LL (Simbal)
568. *cubensis* subsp. *vardyi* Móczár, 1990: *, LA (Lambayeque), LL (Moche, Trujillo)
569. *luctuosa* subsp. *luctuosa* F. Smith, 1864: PA (Oxapampa)

Subgenus: *Ceropales* Latreille, 1796

570. *basirufus* Rohwer, 1913: Endemic*, CU (Santa Ana)

Irenangelus Schulz, 1906 [Evans 1969b, Kimsey & Wasbauer, 2004]

571. *furtivus* Evans, 1969: MD (Avispas)
572. *lucidus* Evans, 1969: HU (Tingo María), MD (Avispas, Pakitza)
573. *ichneumonoides* Ducke, 1908: LO (Iquitos), MD (Avispas, Pakitza), UC (Pucallpa)
574. *reversus* (F. Smith, 1873): HU (Pachitea), MD (Avispas)

Ctenocerinae [=Epipompilinae]

Epipompilus Kohl, 1884, (=*Aulocostethus* Ashmead, 1902) [Evans 1961, 1966e, 1967b]

575. *inca* Evans, 1967: Endemic*, CU (Machu Picchu)
576. *innubus* Evans, 1961: Endemic*, HU (Cuchara)

Pepsinae

Ageniellini

Ageniella Banks, 1912 [Banks 1946, Evans 1973b]

Subgenus: *Alasagenia* Banks, 1944

577. *corymele* Banks, 1946: JU (Chanchamayo)

Subgenus: *Ameragenia* Banks, 1945

578. *alcimeda* Banks, 1946: Endemic*, JU (El Campamento)
579. *pretiosa* Banks, 1946: Endemic*, JU (Chanchamayo)

Subgenus: *Cyrtagenia* Evans, 1973

580. fallax (Arlé, 1947): MD (Avispas)

Subgenus: *Lissagenia* Banks, 1946

581. difformis Banks, 1944: LO (Iquitos)

Subgenus: *Priophanes* Banks, 1944

582. plagosa Banks, 1946: PA (Puerto Bermúdez)

Auplopus Spinola, 1841, (=*Pseudagenia* Kohl, 1885) [Dreisbach 1963]

583. caeruleosoma Banks, 1946: Endemic*, LI (Lima)

584. eriodes Dreisbach, 1963: Endemic*, PI (Piura)

585. lasios Dreisbach, 1963: Endemic*, HU (Tingo María)

586. peruana Banks, 1946: Endemic*, LI (Matucana, Santa Eulalia)

587. striatus Dreisbach, 1963: Endemic*, LI (Lima, Verrugas)

Mystacagenia Evans, 1973 [Evans 1973b]

588. albiceps Evans, 1973: *, MD (Avispas, Pakitza)

589. bellula Evans, 1973: Endemic*, MD (Avispas)

Phanochilus Banks, 1944 [Banks 1946]

590. gloriosus (F. Smith, 1873)

591. nobilitatus F. Smith, 1864: LO (Itaya), PA (Puerto Bermúdez)

592. ornatus Banks, 1946: Endemic*, SM (Achinamisa)

Priocnemella Banks, 1925 [Banks 1946]

593. delila (Banks, 1944): MD (Pakitza)

594. fairchildi (Banks, 1925): MD (Pakitza)

595. hexagona subsp. *omissa* Banks, 1946

596. rufothorax (Banks, 1925): MD (Pakitza)

Pepsini

Adirostes Banks, 1946 [Roig-Alsina 1984]

597. ariphana Roig-Alsina, 1984: HU (Carpish)

598. tolteca Banks, 1946: Endemic*, JU (Casa de patos, Palca)

599. wahisi Roig-Alsina, 1984: LL (Choquisongo)

600. willinki Roig-Alsina, 1984: AN (Conococha)

Aimatocare Roig-Alsina, 1989 [Evans 1968b, Roig-Alsina 1989]

601. longula (Banks, 1946): CU (Paucartambo, Quincemil), MD (Avispas)

602. vitrea (Fox, 1897): SM (Achinamisa)

Caliadurgus Pate, 1946, (=*Calicurgus* Lepeletier de Saint Fargeau, 1845) [Dreisbach 1961b]

603. ornatus (Dreisbach, 1961): Endemic*, HU (Monzón)

Entypus Dahlbom, 1843, (=*Priocnemioides* Radoszkowski, 1888) [Banks 1946, Roig-Alsina 1981]

604. bituberculatus (Guérin-Méneville, 1838): SM (Achinamisa)

605. fossulatus (Giner Marí, 1944): LI (Matucana)

606. mammillatus (Fox, 1897): JU (Chanchamayo, El Campamento)

607. molestus (Banks, 1946): Endemic*, CA (Q Limón), HU (Huánuco), LI (Lima)

608. nitidus (Banks, 1946): JU (Chanchamayo)

609. peruvianus (Rohwer, 1913): Endemic*, CU (Santa Ana), JU (Chanchamayo)

Minagenia Banks, 1934, (=*Nannochilus* Banks, 1944) [Banks 1946]

610. *peruana* (Banks, 1946): Endemic*, JU (Chanchamayo)

Pepsis Fabricius, 1804, (=*Abripepsis* Banks, 1946) [Vardy 2000, 2002, 2005]

Species group: *auriguttata* Burmeister, 1872

611. *auriguttata* Burmeister, 1872: CA, JU, LO, MD, UC

612. *purpureipes* Packard, 1869: JU

613. *sabina* Mocsáry, 1885: CA, JU, LO, SM

Species group: *chiliensis* Lepeletier de Saint Fargeau, 1845

614. *chiliensis* Lepeletier de Saint Fargeau, 1845: AR, LA, LI (Lima, Matucana), (=*inca* Banks, 1946)

Species group: *deaurata* Mocsáry, 1894

615. *deaurata* Mocsáry, 1894: HU, JU, LO (Iquitos)

Species group: *elevata* Fabricius, 1804

616. *elevata* Fabricius, 1804: CU, UC

617. *lycaon* Banks, 1945: CA (Jaén), LA, LI

618. *terminata* Dahlbom, 1843: AP, AY (Ninabamba), CA (Jaén), CU, HU (Iparía), JU, LO, SM, UC, (=*mancoi* Banks, 1946)

Species group: *elongata* Lepeletier de Saint Fargeau, 1845

619. *elongata* Lepeletier de Saint Fargeau, 1845: LO

Species group: *grossa* Fabricius, 1798

620. *grossa* (Fabricius, 1798): CA, JU (Chanchamayo), LA, LO, PI, SM, TU

Species group: *hymenaea* Mocsáry, 1885

621. *marthae* Vardy, 2002: Endemic*, CU (Machu Picchu), JU (Chanchamayo)

622. *pulawskii* Vardy, 2002: Endemic*, AN (Huaylas), CA (Sunchubamba), LA (Chinche, Olmos)

623. *tolteca* Lucas, 1895: AM, AP, AY (Ayacucho), CA, CU, HU (Iparía, Tingo María), JU (La Merced), LI (Matucana, San Bartolomé, San Mateo), LL

Species group: *inclyta* Lepeletier de Saint Fargeau, 1845

624. *asteria* Mocsáry, 1894: HU, LO (Iquitos, Yurimaguas), MD, SM, UC

625. *crassicornis* Mocsáry, 1885: LO

626. *fumipennis* F. Smith, 1855: LO (Iquitos), SM (Cumbasa), (=*pallidicornis* Mocsáry, 1885)

627. *inclyta* Lepeletier de Saint Fargeau, 1845: CA (Celendin), LO, PI, UC, (=*atahualpa* Banks, 1946, =*violaceipennis* Mocsáry, 1885)

628. *luteicornis* Fabricius, 1804: LO (Itaya), UC, (=*alector* Banks, 1946)

629. *sommeri* Dahlbom, 1845

630. *vitripennis* F. Smith, 1855: CA, CU, HU (Huallaga), JU (Chanchamayo), LI, LO (Iquitos), MD, PI, SM, UC, (=*aeneipennis* Banks, 1946, =*amabilis* Mocsáry, 1885)

631. *xanthocera* Dahlbom, 1843: CA, CU, LO (Iquitos), (=*fulgidipennis* Mocsáry, 1885, =*hecuba* Mocsáry, 1885)

Species group: *lampas* Lucas, 1895

632. *cyanescens* Lepeletier de Saint Fargeau, 1845: CA, CU, LO

633. *lampas* Lucas, 1895: AP, AY, MD
634. *multichroma* Vardy, 2005: *, AM (Bagua), CA (Jaén), LA (Chiclayo), PI (Piura)
Species group: *menechma* Lepeletier de Saint Fargeau, 1845
635. *menechma* Lepeletier de Saint Fargeau, 1845: CA, HU, JU (Huacapistana), LO, MD, PA, SM (Cumbasa, Tarapoto), UC, (=*nigricornis* Mocsáry, 1894)
Species group: *montezuma* F. Smith, 1855
636. *montezuma* F. Smith, 1855: AM (Bagua), AP, AR, AY, CA, CU (Machu Picchu), HU, IC, JU (Huacapistana), LA, LI (Lima, Matucana), LL (Otuzco), LO, PA, PI, SM, UC, ("Yucay"), (=*fasciculata* Brèthes, 1908, =*huascar* Banks, 1946, =*peruanus* Lucas, 1895, =*quitonensis* Packard, 1869, =*sibylla* Mocsáry, 1885)
Species group: *pretiosa* Dahlbom, 1843
637. *egregia* Mocsáry, 1885: *, JU, LO (Iquitos), MD (Pakitza)
Species group: *rubra* Drury, 1773
638. *cooperi* Vardy, 2000: AM (Bagua), CA (Jaén, Pomahuaca), LA (Olmos)
639. *heros* (Fabricius, 1798): JU, LO, MD, SM, UC
640. *petitii* Guérin-Méneville, 1831: LA, LI (Matucana), LL, PI, TU, (=*tolteca* Giner Marí, 1944)
641. *vinipennis* Packard, 1869: AM, HU, LO (Iquitos), SM (Moyobamba), (=*erythroptera* Mocsáry, 1885, =*insignis* Mocsáry, 1885)
Species group: *ruficornis* Fabricius, 1775
642. *festiva* Fabricius, 1804: HU, JU, LO, MD (Pakitza), PA, SM, UC, (=*gallardoi* Brèthes, 1908)
643. *gracilis* Lepeletier de Saint Fargeau, 1845: HU, LO (Iquitos), SM, (=*diana* Mocsáry, 1885, =*alceste* Banks, 1946)
644. *hyalinipennis* Mocsáry, 1885: HU, JU, LO (Pebas, Yurimaguas), SM
645. *infuscata* Spinola, 1841: JU (La Merced), LO (Iquitos), SM (Achinamisa, Moyobamba), (=*incerta* Banks, 1946)
646. *krombeini* Vardy, 2005: Endemic*, LO (Pebas)
647. *purpurea* F. Smith, 1873: JU, LO (El Encanto, Putumayo), SM (Achinamisa), (=*consimilis* Banks, 1946, =*laconia* Banks, 1946)
648. *willinki* Vardy, 2005: *, AM (Santiago), CU (Atalaya), HU (Monzón, Sinchona, Tingo María), PA (Puerto Bermúdez), UC (Atalaya)
Species group: *seladonica* Dahlbom, 1843
649. *seladonica* Dahlbom, 1843: MD, UC
Species group: *sumptuosa* F. Smith, 1855
650. *apicata* Taschenberg, 1869: LO
651. *aurozonata* F. Smith, 1855: LO, UC
652. *plutus* Erichson, 1849: MD (La Torre), UC
653. *pulszkyi* Mocsáry, 1885: AM, HU, JU, LO, SM
654. *toppini* Turner, 1915: CA, HU (Huallaga), JU (Chanchamayo, Perené, Satipo), MD, PA, UC, (=*selvatica* Brèthes, 1920)

Species group: *viridis* Lepeletier de Saint Fargeau, 1845

655. *dayi* Vardy, 2005: *, CU (Atalaya), UC (B Abad)
656. *hirtiventris* Banks, 1946: HU, LO (Iquitos, Mishuyacu, San Roque), SM (Achinamisa)
657. *ianthina* Erichson, 1848: CA, LI, LO (Iquitos, Pebas)
658. *nana* Mocsáry, 1885: AM, AP, AY (Ninabamba), CA, CU, HU, JU (Chanchamayo, Perené), LO (Iquitos, La Chorrera, La Sombra), MD, PA (Puerto Bermúdez), SM, UC (Yarinacocha), (=*amautas* Banks, 1946, =*ilione* Banks, 1946, =*moesta* Banks, 1946, =*orestes* Banks, 1946)
659. *viridis* Lepeletier de Saint Fargeau, 1845: MD, (=*erecta* Brèthes, 1914, =*mimetica* Brèthes, 1914)

Pompilocalus Roig-Alsina, 1989 (partly, =*Calopompilus* Ashmead, 1900) [Roig-Alsina 1989]

660. *carrascoi* Roig-Alsina, 1989: Endemic*, CU (Acomayo, Chocco, Urubamba)
661. *edmondii* (Brèthes, 1924): AP (Andahuaylas), AR (Arequipa), AY (Lucanas, Quinua), CU (Acomayo, Chocco, Cusco, Lucre, Machu Picchu), LI (Matucana), LO (Iquitos), PU (Arapa, Chucuito, Chuquibambilla, Puno, Sillustani, Tirapata)
662. *hirticeps* (Guérin-Méneville, 1838): TA (Tacna)
663. *huaynacapac* Roig-Alsina, 1989: *, CU (Chocco)
664. *mancocapac* Roig-Alsina, 1989: Endemic*, LI (Huamantanga)
665. *maytocapac* Roig-Alsina, 1989: Endemic*, CU (Acomayo, Chocco, Cusco, Pisaq, Urubamba)
666. *pachacutec* Roig-Alsina, 1989: Endemic*, AP (Andahuaylas), AR (Arequipa), AY (Tambo), CU (Acomayo, Capana, Chocco, Cusco, Limatambo, Lucre, Paucartambo, Sacsayhuaman, San Sebastián, Urubamba), JU (Acolla, Tarma-Jauja), LI (Huamantanga, Tambo)
667. *tacaynamo* Roig-Alsina, 1989: Endemic*, LL (Choquisongo)
668. *tupacyupanqui* Roig-Alsina, 1989: Endemic*, JU (Acolla, Satipo), CU (Acomayo, Chocco, Cusco)

Priocnemis Schiödte, 1837 [correct genus?] [Dalla Torre 1897]

669. *dichrous* Dalla Torre, 1897: (=*bicolor* Taschenberg, 1880)

Priocnessus Banks, 1925 [Dreisbach 1960, 1961a]

670. *grandis* Dreisbach, 1961: Endemic*, UC (Ucayali)
671. *prominens* Banks, 1945
672. *semirufus* Dreisbach, 1960: Endemic*, CA (Huascaray)

Pompilinae [Evans 1966a]

Aporini

Aporus Spinola, 1808 [Evans 1973a]

Subgenus: *Aporus* Spinola, 1808

673. *cuzco* Evans, 1973: Endemic*?, CU (Cusco, Chocco, Lucre)

Subgenus: *Neoplaniceps* Bradley, 1944

674. umbratilis Evans, 1966: CU (Lucre, Quincemil, Chocco)
Subgenus: *Notoplaniceps* Bradley, 1944
675. canescens F. Smith, 1873: HU (Tingo María), MD (Avispas)
Euplaniceps Haupt, 1930 [Bradley 1944]
676. ceres (Cameron, 1897): MD (Pakitza)
677. varia Bradley, 1944: LO (San Roque)

Pompilini

Agenioideus Ashmead, 1902 [Evans 1965b]
Subgenus: *Enbanksia* Evans, 1965
678. minutus (Banks, 1947): MD (Avispas)
Anoplius Dufour, 1834, (=*Psammochares* Latreille, 1796) [Banks 1947, Evans 1950]
Subgenus: *Anopliodes* Banks, 1939
679. varius (Fabricius, 1804)
Subgenus: *Anoplius* Dufour, 1834
680. fulgidus (Cresson, 1865): PA (Puerto Bermúdez), (=*amarus* Banks, 1947, =*mundulus* Fox, 1897)
681. minor Banks, 1947: Endemic*, AR (Arequipa)
Subgenus: *Arachnophroctonus* Howard, 1901
682. arequipensis (Brèthes, 1924): AR (Arequipa)
683. atrimene Banks, 1947: LI
684. escomeli (Brèthes, 1912): Endemic*, AR (Sabandia) [correct genus?]
685. inculcatrix (Cameron, 1912): JU (El Campamento)
686. marginicollis (Taschenberg, 1869): PA (Puerto Bermúdez)
687. peruviana Banks, 1947: Endemic*, PA (Victoria), PU (Puno)
Subgenus: *Notiochares* Banks, 1917
688. amethystinus subsp. *amethystinus* (Fabricius, 1793)
689. amethystinus subsp. *exclusus* (F. Smith, 1873)
690. diffinis Banks, 1947: Endemic*, LO (Iquitos)
Aporinellus Banks, 1911
691. sp.: LI [Palacios 1976]
Arachnospila Kincaid, 1900, (=*Pycnopompilus* Ashmead, 1902)
692. dichromorphus (Rohwer, 1913): Endemic*, CU (Cusco), LI (Pativilca), JU (La Oroya)
693. titicacaensis (Strand, 1911): Endemic*, PU (Puno), (=*toltecus* Banks, 1947)
Aridestus Banks, 1947 [Evans 1966f]
694. porteri Evans, 1966: CU (Cusco)
Austrochares Banks, 1947 [Evans 1969a]
695. elsinore Banks, 1947: Endemic*, LI (Lima)
Balboana Banks, 1944 [Banks 1946]
696. auripennis (Fabricius, 1804): MD (Pakitza)
697. fraternus Banks, 1946: Endemic*, LI (Lima)
Episyron Schiödte, 1837
698. conterminus subsp. *conterminus* F. Smith, 1873: LI (Lima)

Evagetes Lepeletier de Saint Fargeau, 1845, (=*Sophropompilus* Howard, 1901, =*Nannopompilus* Ashmead, 1902) [Banks 1947]

699. peruana Banks, 1947: Endemic*, LL (Trujillo), PA (Victoria)

Paracyphononyx Gribodo, 1884, (=Allocyphonyx Ashmead, 1902) [Banks 1947]

700. incalis Banks, 1947: Endemic*, AY (Ninabamba), LO (La Sombra)

Poecilopompilus Howard, 1901, (=*Batazonus* Banks, 1912) [Banks 1947]

701. apicalis (Banks, 1947): JU (Perené)

702. decedens (F. Smith, 1873): LO (Iquitos)

703. rubricatus (F. Smith, 1879): PI (Negritos)

Priochilus Banks, 1944 [Banks 1946]

704. formosus Banks, 1944: JU (Perené)

705. gloriosum subsp. *multifasciatum* (Taschenberg, 1869)

706. imperius Banks, 1944: LO (Iquitos, Itaya, La Sombra)

707. nobilis (Fabricius, 1787): JU (El Campamento)

708. peruanus Banks, 1946: Endemic*, LO (Iquitos, Mishuyacu)

709. regius subsp. *infumatus* Banks, 1946: AM (Santiago), HU (Upper Río Huallaga), LO (Iquitos), SM (Achinamisa)

710. regius subsp. *regius* Fabricius, 1804: AM (Santiago), UC (San Alejandro)

711. scrupulum (Fox, 1897): MD (Pakitza)

712. sericeifrons (Fox, 1897): MD (Pakitza)

713. splendidulum subsp. *splendidulum* (Fabricius, 1804): MD (Pakitza)

714. superbus Banks, 1944: LO (Iquitos), SM (Achinamisa)

715. veraepascis (Cameron, 1893): MD (Pakitza)

Tachypompilus Ashmead, 1902 [Banks 1947]

716. pallidus Banks, 1947: Endemic*, LI (Matucana)

717. xanthopterus (Rohwer, 1913): CU (San Miguel)

Unknown position [=Notocyphinae]

Notocyphus F. Smith, 1855 [Banks 1947]

718. brevicornis Fox, 1897: Endemic?, HU (Huánuco)

719. maculifrons F. Smith, 1873: Endemic?, LO (Iquitos)

720. pallidipennis Banks, 1947: Endemic*, AM (Santiago)

721. signatus Banks, 1947: Endemic*, LO (La Sombra)

722. thetis Banks, 1945

723. tyrannicus F. Smith, 1855: LO (Iquitos)

724. vindex F. Smith, 1864: LO (Iquitos)

Rhopalosomatidae

Townes (1977) provided a key for Neotropical genera and species. The Neotropical genera were also keyed in Hanson and Gauld (2006) and Fernández and Sharkey (2006).

Liosphex Townes, 1977

725. varius Townes, 1977: MD (Avispas, Tambopata)

Rhopalosoma Cresson, 1865

726. guianense Schulz, 1906: JU (Chanchamayo), MD (Avispas), (=*martinezi* Ogloblin, 1951)

Sapygidae

Pate (1947) provided a key to the World genera and the species for two of the three Neotropical genera (*Araucania* Pate, 1947 and *Huarpea* Pate, 1947), but record no species for Peru. A generic key is also provided in Fernández and Sharkey (2006). An undescribed *Sapyga* Latreille, 1796 has been reported from Brazil (Hanson and Gauld 2006).

Scoliidae

Bradley (1945, 1957, 1964) in a series of papers provided keys to *Campsomeris* subgenera and some of the species. Argaman (1996) reclassified Scoliidae and proposed several new dubious Neotropical genera ignored here and elsewhere (see also Hanson and Gauld, 2006).

Campsomerinae

Campsomeris Guérin-Méneville, 1839

Subgenus: *Aelocampsomeris* Bradley, 1957

727. brethesi (Bradley, 1927): Endemic*, LO (San Roque)

728. variegata Fabricius, 1793: (=*costalis* Lepeletier de Saint Fargeau, 1845)

Subgenus: *Campsomeris* Guérin-Méneville, 1839

729. peregrina (Lepeletier de Saint Fargeau, 1845)

730. regifica Bradley, 1945: HU (Huallaga)

731. servillei Guérin-Méneville, 1838: LI [Dalla Torre 1897, Soukup 1943, Palacios 1976]

Subgenus: *Dielis* de Saussure & Sichel, 1864

732. chilensis (de Saussure & Sichel, 1864): CU (Santa Ana), (=*similaris* Rohwer, 1913)

733. dorsata Fabricius, 1787: LO (Iquitos)

734. whitelyi W.F. Kirby, 1889: CU (Tambo)

Tiphiidae

Kimsey (1991c) listed genera of the family and presented keys for the genera of Tiphiinae (1993) and Thynninae (2004). Kimsey in Fernández and Sharkey (2006) provided

illustrated keys to all Neotropical genera of Tiphiidae. Arbouw (1985) listed all species of Tiphiinae. Additional revisions and notes in Krombein (1979), Genise and Kimsey (1991), Genise (1992), Kimsey and Brown (1993), and Kimsey (1996).

Anthoboscinae

Anthosila Genise, 1985 [Genise 1985]

735. inca Genise, 1985: Endemic*, UC (Pucallpa)

Myzinae

Myzinum Latreille, 1803

736. sp/spp.

Thynninae

Aelurus Klug, 1842 [Kimsey 1991a]

737. clypeatus Klug, 1842: LO (Iquitos), MD (Avispas)

Chrysothynnus Turner, 1910

738. inca (Turner, 1908)

Elaphroptera Guérin-Méneville, 1838 [Genise & Kimsey 1993]

739. boliviana Genise & Kimsey, 1993: CU (Machu Picchu), PU (Ayaviri, Puno)

740. cuzcoensis Genise & Kimsey, 1993: Endemic*, CU (Acjanacu)

741. fuscata Genise & Kimsey, 1993: CU (Machu Picchu)

742. strandi Turner, 1910: *, CU (Marcapata)

Pseudelaphroptera Ashmead, 1903

743. maura Rohwer, 1913: Endemic*, CU (Tincochaca)

Scotaena Klug, 1810

744. sp/spp. [Kimsey 2004]

Telephoromyia Guérin-Méneville, 1838 [Turner 1910, as *Spilothynnus* Ashmead, 1903]

745. excisa Turner, 1908: Endemic*

746. peruviana Turner, 1908: Endemic*, CU (Urubamba)

Tiphiinae

Epomidiopteron Romand, 1836

747. julii Romand, 1836: HU (Tingo María)

Megatiphia Kimsey, 1993 [Kimsey 1993]

748. fuscata Kimsey, 1993: Endemic*, JU (Chanchamayo)

Tiphia Fabricius, 1775 [Allen 1972]

Subgenus: *Tiphia* Fabricius, 1775

749. academae Allen, 1972: Endemic*, HU (Monzón)

750. ancha Allen, 1972: Endemic*, JU (Chanchamayo)

751. bassleri Allen, 1972: *, SM (Achinamisa)

752. cuzcoa Allen, 1972: Endemic*, CU (Machu Picchu)

753. delta Allen, 1972: Endemic*, HU (Monzón)

754. *fulvitarsis* Rohwer, 1912: Endemic*, LA (Chiclayo), LL (Pacasmayo), PI (Piura)
755. *gilvapennis* Allen, 1972: *, HU (Monzón), PU
756. *huallaga* Allen, 1972: Endemic*, HU (Upper Río Huallaga)
757. *iquitosa* Allen, 1972: Endemic*, LO (Iquitos)
758. *lima* Allen, 1972: Endemic*, AY, LI (Chancay)
759. *maria* Allen, 1972: Endemic*, HU (Monzón)
760. *monsona* Allen, 1972: Endemic*, HU (Monzón, Tingo María), MD (Avispas)
761. *pallisteri* Allen, 1972: Endemic*, SM (Moyobamba)
762. *penai* Allen, 1972: Endemic*, MD (Avispas)
763. *perubra* Allen, 1972: *, LO (Peru-Brazil border)
764. *putumayoa* Allen, 1972: Endemic*, LO (La Chorrera)
765. *quincemila* Allen, 1972: Endemic*, MD (Quincemil)
766. *scalariformis* Allen, 1972: Endemic*, HU (Tingo María)

Vespidae

Richards (1978), Carpenter (2004), and Carpenter and Garcete-Barrett (2002) provided keys to the genera of the Polistinae and Eumeninae, while Sarmiento and Carpenter in Fernández and Sharkey (2006) provided keys for the Neotropical genera of Vespidae. Richards (1978) revised and provided keys to all Polistinae species with some corrections by Carpenter (1999). Synonymic listing is here limited to species originally described from Peru or cited under that name by Weyrauch (1943). Weyrauch (1943) used several manuscript names of Zikán, those that were never published are *nomina nuda* (Weyrauch numbers 6, 15, 18, 22, 23, 25, 27). Additional distribution records from Huánuco (Llullapichis) were taken from http://www.zobodat.at (accessed July 3, 2006).

Eumeninae

Alphamenes van der Vecht, 1977 [Giordani Soika 1978]
767. *campanulatus* (Fabricius, 1804): HU (Monzón, Tingo María), JU (Chanchamayo, El Campamento), UC (Pucallpa)
768. *semiplanus* Giordani Soika, 1978: *, HU (Llullapichis), LO (Iquitos), UC (Pucallpa)
Ancistroceroides de Saussure, 1855
769. *cirrifer* (Zavattari, 1912): Endemic*, no locality given [**comb. n.**, J.M. Carpenter, pers. com.]
Ancistrocerus Wesmael, 1836 [Zavattari 1912]
770. *epicus* (Zavattari, 1912): Endemic*, ("San Paulo") [**comb. n.**, J.M. Carpenter, pers. com.]
771. *pilosus* de Saussure, 1855: AN (Huaráz), PA (Huancabamba)
Brachymenes Giordani Soika, 1961 [Giordani Soika 1990]
772. *dyscherus* subsp. *dyscherus* (de Saussure, 1852): CU (Callanga), HU (Llullapichis), JU (Chanchamayo), UC (B Abad, Pucallpa)

773. wagnerianus (de Saussure, 1875): JU (Chanchamayo)

Cephalastor Giordani Soika, 1982 [Garcete Barrett 2001, 2002]

774. chasqui Garcete Barrett, 2001: JU (Chanchamayo)

775. lambayeque Garcete Barrett, 2002: Endemic*, LA (Lambayeque)

776. tupasy Garcete Barrett, 2001: Endemic*, MD (Puerto Maldonado, Tambopata)

Cyphomenes Giordani Soika, 1978 [Giordani Soika 1978]

777. infernalis subsp. *infernalis* (de Saussure, 1875): HU (Llullapichis), UC (Pucallpa)

778. infernalis subsp. *weyrauchi* Giordani Soika, 1978: *, JU (Satipo)

Eumenes Latreille, 1802 [Giordani Soika 1978]

Subgenus: *Zeteumenoides* Giordani Soika, 1972

779. filiformis (de Saussure, 1855): LO (Iquitos), UC (Pucallpa)

780. versicolor de Saussure, 1852: HU (Llullapichis)

Gamma Zavattari, 1912 [Giordani Soika 1990]

781. ventricosum subsp. *peruvianum* (Zavattari, 1912): Endemic*, CU (Vilcanota)

782. ventricosum subsp. *ventricosum* (de Saussure, 1852): PA (Huancabamba)

Hypalastoroides de Saussure, 1852 [Giordani Soika 1958, 1982]

Subgenus: Hypalastoroides de Saussure, 1852

783. argentinus (Brèthes, 1903)

784. brasiliensis (de Saussure, 1856): JU (Satipo)

Hypancistrocerus de Saussure, 1855

785. sp/spp.: JU, UC

Hypodynerus de Saussure, 1855 [Dalla Torre 1894, Rohwer 1913, Giordani Soika 1961, Willink 1970, 1978]

786. akros Willink, 1970: Endemic*, JU (Casapalo)

787. andeus (Packard, 1869): AN (Huaráz, Recuay), AR (Arequipa, Cotahuasi, Tiabaya, Yura), CU (Cusco, Miravalle, Ollantaytambo, San Sebastián, Vilcanota), LI (Canta, Miñita, Matucana, San Mateo, Santa Eulalia, Verrugas), LL (Otuzco), TA (Tacna), ("Chacarilla"), (=*tapiensis* de Saussure, 1870)

788. arequipensis (du Buysson, 1913): AR (Arequipa)

789. chiliotus de Saussure, 1852: AR (Arequipa), CU (Callanga), (=*vardyi* Giordani Soika, 1974)

790. dimidiaticornis Zavattari, 1912: Endemic*, CU (Marcapata)

791. foersteri Giordani Soika, 1961: PU (Camacani, Chimú, Crucero Alto, La Huerta, Puno, Urcunimuni)

792. huancabambae Schrottky, 1911: Endemic*, PA (Huancabamba), (=*rufotegulatus* Zavattari, 1912)

793. joergenseni Schrottky, 1909

794. nigricornis Rohwer, 1913: *, CU (Cusco), JU (La Oroya)

795. obscuripennis (Spinola, 1851)

796. rufinodis (du Buysson, 1913): Endemic*, AR (Arequipa), TA (Tarata)

797. tarabucensis (de Saussure, 1855): PU (Puno)

798. vestitus (de Saussure, 1855): CU

Incodynerus Willink, 1968 (partly, =*Hypodynerus* de Saussure, 1855) [Willink 1969]

799. *alticola* Willink, 1969: *, AR, CU (Cusco), PU (Amantaní, Camacani, La Huerta, Puno)

800. *ambiguus* Willink, 1969: Endemic*, AP (Andahuaylas)

801. *coccineipes* (Zavattari, 1912): *, CU (Cusco, Lucre, Vilcanota)

802. *melanotrichus* Willink, 1969: LI (Pativilca)

803. *romandinus* (de Saussure, 1852): CA (Jaén), CU (Tincochaca), PA (Huancabamba), (=*hirsutulus* Rohwer, 1913, **syn. n.**, J.M. Carpenter, pers. com.)

804. *tegularis* (Schrottky, 1911): Endemic*, AN (Huaráz), AP (Abancay), CA (Cutervo), CU (Cusco, Lucre), LI (Matucana), PA (Huancabamba),

805. *urubambae* (Schrottky, 1911): CU (Urubamba)

806. *vilcanotae* (Zavattari, 1912): *, CU (Cusco, Vilcanota), LA (Olmos (2000m)), PU (Camacani, La Huerta)

Minixi Giordani Soika, 1978 [Giordani Soika 1978]

807. *brasilianum* (de Saussure, 1978): HU (Llullapichis, Tingo María)

Monobia de Saussure, 1852 [Willink 1982]

808. *angulosa* de Saussure, 1852: AP (Abancay-Cusco), AY (Ninabamba), CU (Ocobamba, Vilcanota), JU (Chanchamayo, Pampa Hermosa), LO (Iquitos), SM, UC (Pucallpa), (=*insularis* Ashmead, 1900)

809. *atrorubra* Ducke, 1904: LO (Iquitos)

810. *caliginosa* Willink, 1982: PA (Huancabamba)

811. *cyanipennis* (Guérin-Méneville, 1831): *, AN (Huallanca), AR (Camaná), LA (Chongoyape, Lambayeque, Oyotun, Zaña), LI (Atocongo, Lima, Q. Verde, Santa Rosa de Quives), LL (San Pedro de Lloc), PI (Lobitos, Negritos, Paita), TU (Tumbes)

812. *deplanata* Ducke, 1908: LO (Mishuyacu)

813. *funebris* Gribodo, 1891: CU (Paucartambo), HU (Llullapichis, Tingo María), JU (Chanchamayo), LO (Yurimaguas)

814. *incarum* Bequaert, 1912: *, AR (Tambo), CA (Sunchubamba), LL (Chepén, Lambayeque), LI (Barranca, Chorrillos, Lima, Santiago de Surco, Verrugas), LL (Simbal)

Montezumia de Saussure, 1852 [Willink 1982]

815. *analis* de Saussure, 1855: HU (Llullapichis), JU (Satipo), LO (Iquitos, Mishuyacu), SM (Achinamisa), UC (San Alejandro)

816. *azurescens* (Spinola, 1851): AP, CU (Callanga, Vilcanota), HU (Llullapichis, Monzón, Pachitea), JU (Pan de Azúcar, Satipo), LI (Callao), LO (Iquitos, Mishuyacu), UC (Atalaya, Pucallpa)

817. *coeruleorufa* Willink, 1982: CU (Callanga), HU (Tingo María), LO (Mishuyacu)

818. *dimidiata* de Saussure, 1852: HU (Llullapichis, Sinchona, Tingo María), JU (Chanchamayo, Pan de Azúcar, Satipo), LO (Iquitos, Mishuyacu), SM (Bellavista), UC (Pucallpa)

819. *grossa* Willink, 1982: UC (Neshuya)
820. *liliacea* Gribodo, 1891: HU (Tingo María), JU, UC (Pucallpa)
821. *liliaciosa* Gribodo, 1891: *, LO (Pebas)
822. *morosa* de Saussure, 1852: JU (Satipo)
823. *pelagica* subsp. *pelagica* de Saussure, 1852: AM (Marañón), HU (Tingo María), LO (Iquitos), UC (La Junta, Pucallpa)
824. *pelagica* subsp. *sepulchralis* de Saussure, 1855: HU (Llullapichis), UC (Pucallpa)
825. *petiolata* de Saussure, 1855: HU (Tingo María)
826. *trinitata* Willink, 1982: SM
827. *vechti* Willink, 1982: CU (Callanga), HU (Cueva de las Pavas, Pachitea), LO (Iquitos), MD (Iberia)

Omicron de Saussure, 1855 [Giordani Soika 1978]

828. *aequale* Giordani Soika, 1978: HU (Previsto, Tingo María), (=*nigritum* Giordani Soika, 1978)
829. *belti* (Cameron, 1907): CU (Callanga)
830. *conclamatum* Giordani Soika, 1978: HU (Tingo María), UC (Pucallpa)
831. *criticum* subsp. *criticum* (Schulz, 1906): CU (Quincemil), HU (Tingo María), JU (Chanchamayo, El Campamento), PA (Puerto Bermúdez), UC (Atalaya, Pucallpa), (=*gracilis* Fox, 1899)
832. *criticum* subsp. *richardsi* Giordani Soika, 1978: CU (Vilcanota), SM
833. *foxi* (Schulz, 1905): LO (La Sombra)
834. *globicolle* (Spinola, 1841): CU (Callanga), HU (Llullapichis, Pachitea), JU (Chanchamayo), LO (La Chorrera, Putumayo), UC (Pucallpa)
835. *gondwanianum* Giordani Soika, 1978: CU (Machu Picchu), HU (Divisoria, Sinchona), JU (El Campamento, Huacapistana, Oreja de Capelo)
836. *lustratum* Giordani Soika, 1978: UC (Pucallpa)
837. *nanum* subsp. *incarum* Giordani Soika, 1978: *, CU (Callanga, Quincemil), HU (Previsto, Tingo María), JU (Chanchamayo, El Campamento), LO (Iquitos), MD (Avispas), UC (Atalaya, Pucallpa)
838. *nymphale* (Zavattari, 1912): HU (Tingo María), JU (Chanchamayo)
839. *paranymphum* (Zavattari, 1912): HU (Previsto, Tingo María), JU (El Campamento), UC (Pucallpa)
840. *reliquum* Giordani Soika, 1978: JU (Oreja de Capelo)
841. *rubellulum* subsp. *flavellulum* Giordani Soika, 1978: *, CA (Tembladera), LL (Chepén), LI (Chosica)
842. *ruficolle* subsp. *schunkei* Giordani Soika, 1978: Endemic*, JU (Chanchamayo)
843. *ypsilon* Giordani Soika, 1978: CU (Vilcanota)

Pachodynerus de Saussure, 1870 [Willink & Roig-Alsina 1998]

844. *argentipilis* Willink & Roig-Alsina, 1998: HU (Monzón)
845. *bicuspidatus* Willink & Roig-Alsina, 1998: *, LI (Chosica, Lima, Rímac), LA (Lambayeque, Zaña), LI (Chancay), LL (Chepén, Chicama, Samne, Simbal, Trujillo)

846. *brevithorax* (de Saussure, 1853): HU (Tingo María), LA (Olmos), LO (Iquitos, Tapiche), UC (Pucallpa, Yarinacocha)
847. *diabolicus* (de Saussure, 1853): Endemic*, AN (Casma), IC (Pisco), LA (Lambayeque, Zaña), LI (Callao, Cocachacra, Cupiche, La Molina, Matucana, Palle, Santa Eulalia, Surco, Verrugas), LL (Chepén, Laredo, Simbal, Trujillo), PI (Negritos, Paita, Talara)
848. *gaullei* Brèthes, 1920: CA (Q Nancho), LA (Chongoyape, Lambayeque, Motupe, Oyotum, Olmos, Zaña), LL (Chepén, Pacasmayo, Samne, Simbal, Trujillo), LI (Chancay, Chosica, Cupiche, Palle, Santa Eulalia), PI (Mogollón, Rumipampa), TU (Puerto Pizarro)
849. *gianellii* (Gribodo, 1891): HU (Llullapichis, Tingo María)
850. *grandis* Willink & Roig-Alsina, 1998: LL (Simbal)
851. *guadulpensis* (de Saussure, 1853): AP (Curahuasi), AY (Cangallo, Huanta, Ninabamba), CA (Jaén), CU (Quillabamba, Santa Ana), HU (Las Palmas, Llullapichis, Monzón, Tingo María, Yurac), JU (Chanchamayo, Huancayo, La Merced, Perené, San Luis de Shuaro), MD (Tambopata), PA (Huancabamba), UC (Acobamba, Pucallpa), (=*praecox* de Saussure, 1855, =*zonatus* de Saussure, 1870)
852. *laplatae* (de Saussure, 1870): AY (Huatatas)
853. *lima* Willink & Roig-Alsina, 1998: *, CA (Carahuasi, Q Nancho), LA (Lambayeque), LI (Chosica, Cupiche, Lima, Palle, Surco, Santa Eulalia, Verrugas), LL (Cartavio, Chicama, Samne, Simbal, Trujillo), TU (Tumbes)
854. *nasidens* (Latreille, 1817): CU (Cosñipata), HU (Cueva de las Pavas, Llullapichis, Previsto, Tingo María), JU (Chanchamayo), LA (Lambayeque), LI (Chosica), LL (Cartavio), MD (Tambopata), UC (Pucallpa, San Alejandro)
855. *pannus* Willink & Roig-Alsina, 1998: LA (Lambayeque)
856. *parachartergoides* (Ducke, 1911): HU (Cueva de las Pavas)
857. *peruensis* (de Saussure, 1855): AR (Arequipa, Sabandia, Tiabaya, Tingo, Yura), CA (Querocotillo), CU (Callanga, Cusco, Huaisampillo), IC (Huacachina), LA (Chongoyape, Motupe, Olmos), LI (Barranca, Chosica, Cupiche, La Molina, Lima, Matucana, Pachacámac, Palle, Surco, Santa Eulalia, Verrugas), LL (Cartavio, Chicama, Simbal, Trujillo), PI (Negritos, Paita, Piura, Talara), PU (La Huerta, Santo Domingo), TA (Tacna), ("El Pasto")
858. *ucayali* Willink & Roig-Alsina, 1998: *, UC (San Alejandro)

Pachymenes de Saussure, 1852 [Giordani Soika 1990]

859. *ghilianii* subsp. *olivaceus* (de Saussure, 1875): HU (Tingo María), LO (Iquitos, Pebas), (=*velutinus* Ducke, 1911)
860. *obscurus* subsp. *consuetus* Giordani Soika, 1990: MD (Avispas), UC (B Abad)
861. *orellanae* subsp. *orellanae* (Schulz, 1905): HU (Llullapichis), JU (Chanchamayo), UC (Pucallpa)
862. *orellanae* subsp. *vardyi* Giordani Soika, 1990: HU (Llullapichis, Tingo María)

863. peruanus Schrottky, 1911: CU

Pachyminixi Giordani Soika, 1978 [Giordani Soika 1978]

864. bifasciatum (von Schulthess, 1904): CU (Cusco, Lucre)

Parancistrocerus Bequaert, 1925

865. sp/spp.: SM

Pararhaphidoglossa von Schulthess, 1910 [Giordani Soika 1978]

866. bicarinata Giordani Soika, 1978: *, HU (Pachitea), UC (Pucallpa)

867. colorata (Fox, 1899): JU (Chanchamayo, El Campamento), UC (Pucallpa)

868. imitatrix Giordani Soika, 1978: LO (La Chorrera), UC (Pucallpa)

869. invenusta Giordani Soika, 1978: HU (Tingo María), LO (Mishuyacu, San Roque)

Parazumia de Saussure, 1855 [Ajmat & Willink 1980, Carpenter & Garcete-Barrett 2005]

870. carinulata (Spinola, 1851): CU (Callanga), LO (Mishuyacu), UC (Pucallpa)

Pirhosigma Giordani Soika, 1978 [Giordani Soika 1978]

871. mearimense subsp. *putumayense* Giordani Soika, 1978: LO (Putumayo)

Pseudodynerus de Saussure, 1855 [Hermes & Melo 2008]

872. maxillaris (de Saussure, 1875): CU, JU (Chanchamayo), UC (Pucallpa), (=*garleppi* Schrottky, 1911)

873. subapicalis (Fox, 1902): HU (Tingo María), JU (Perené)

Santamenes de Saussure, 1857 [Giordani Soika 1990]

874. novarae (de Saussure, 1867): CU (Callanga, Vilcanota), HU (Llullapichis, Monzón, Tingo María), UC (Pucallpa)

875. peregrinus (Zavattari, 1912): *, CU (Callanga), HU (Llullapichis), LO (Pebas)

Sphaeromenes Giordani Soika, 1978 [Giordani Soika 1978]

876. discrepatus Giordani Soika, 1978: Endemic*, LI (Chillón, Rímac (1400m))

Stenodynerus de Saussure, 1863

877. corallineipes (Zavattari, 1912): Endemic*, AN (Caraz) [**comb. n.**, J.M. Carpenter, pers. com.]

878. inca de Saussure, 1871: LI

879. mimeticus Bertoni, 1918: *, AR (Arequipa), CU (Barrio Magisterial, Lucre, Pisaq), (=*pavidus* subsp. *cuzcoensis* Giordani Soika, 1974)

Stenonartonia Giordani Soika, 1973

880. apicipennis (Fox, 1902): CU (Callanga), (=*lugens* von Schulthess, 1904)

881. polybioides (von Schulthess, 1904): CU (Callanga), HU (Llullapichis), LO (Iquitos)

Stenosigma Giordani Soika, 1978 [Giordani Soika 1978, 1990]

882. humerale Giordani Soika, 1990: JU (Chanchamayo), PA (Dos de Mayo, Pichis)

883. testaceum (Fox, 1899): UC (Pucallpa)

"*Symmorphus*" Wesmael, 1836

Subgenus: *Symmorphus* Wesmael, 1836

884. cristatus de Saussure, 1855, (=*pumilus* de Saussure, 1855) [Cumming (1989:85) reports that this was a misidentification. Unknown status]

Zeta de Saussure, 1855 [Giordani Soika 1975, Carpenter 1987]

885. *argillaceum* (Linnaeus, 1758): AP (Abancay-Cusco), CA (Jaén), HU (Huánuco), JU (Chanchamayo, El Campamento, Huacapistana), LI (Chosica, Lima, Verrugas), PI, UC (Pucallpa), (=*apurimacensis* Giordani Soika, 1975, =*dives* Zavattari, 1912, =*incarum* Giordani Soika, 1975, =*orbignii* de Saussure, 1852, =*peruense* Giordani Soika, 1975)

Zethus Fabricius, 1804 [Bohart & Stange 1965, Stange 1976, 1978]

Subgenus: *Zethoides* Fox, 1899

886. *biglumis* subsp. *biglumis* Spinola, 1841: LO (Iquitos)

887. *binodis* (Fabricius, 1793): LO (Putumayo)

888. *carinatus* F. Smith, 1857: JU (El Campamento)

889. *peruvicus* R. Bohart & Stange, 1965: Endemic*, LO (Iquitos)

890. *pygmaeus* Zavattari, 1912: *, LO (Pebas), HU (Monzón)

891. *schadei* R. Bohart & Stange, 1965: JU (Perené)

892. *schlingeri* R. Bohart & Stange, 1965: Endemic*, UC (Pucallpa)

893. *toltecus* subsp. *toltecus* de Saussure, 1875: HU (Tingo María), LO (Pebas), (=*duckei* Zavattari, 1912)

Subgenus: *Zethus* Fabricius, 1804

894. *adonis* R. Bohart & Stange, 1965: HU (Tingo María), (=*brasiliensis* Fox, 1899)

895. *alticola* R. Bohart & Stange, 1965: Endemic*, CA (Cutervo, Cajamarca), LI (Callahuanca, Churín, Matucana, Palle), LL (Samne)

896. *attenuatus* R. Bohart & Stange, 1965: Endemic*, HU (Monzón)

897. *boharti* Stange, 1976: Endemic*, LO (Iquitos)

898. *caracis* R. Bohart & Stange, 1965: Endemic*, SM (Achinamisa)

899. *chimorum* R. Bohart & Stange, 1965: HU (Pachitea), LO (Yurimaguas)

900. *cylindricus* Fox, 1899: CU (Sahuaycu), HU (Pachitea), JU (Chanchamayo)

901. *fritzi* Stange, 1978: *, LL (Laredo, Samne, Simbal)

902. *fuscus* (Perty, 1833): HU (Llullapichis, Monzón), LI (Chancay), LL (Simbal), LO (La Chorrera)

903. *garciai* R. Bohart & Stange, 1965: Endemic*, AY (Cangallo)

904. *harlequinus* R. Bohart & Stange, 1965: Endemic*, JU (Huacapistana)

905. *huascari* R. Bohart & Stange, 1965: Endemic*, PA (Pozuzo)

906. *inca* Kirsch, 1878: JU (Chanchamayo, Huacapistana)

907. *infundibuliformis* (Fabricius, 1804): Peru?

908. *neffi* Stange, 1978: Endemic*, LA (Lambayeque)

909. *peruvianus* Zavattari, 1912: Endemic*, CU (Vilcanota)

910. *roridus* Zavattari, 1912: LO (Pebas)

911. *rossi* R. Bohart & Stange, 1965: Endemic*, HU (Monzón)

912. *scandens* Zavattari, 1913: Endemic*, HU (Pachitea)

913. *schulthessi* Zavattari, 1913: Endemic*

914. *shannoni* R. Bohart & Stange, 1965: Endemic*, LO (Iquitos)

915. *sichelianus* (de Saussure, 1855): LA (Lambayeque)

916. *simulans* R. Bohart & Stange, 1965: Endemic*, CA (Jaén)

917. *smithii* de Saussure, 1855: CU (Vilcanota), HU (Llullapichis, Monzón), SM
918. *weyrauchi* R. Bohart & Stange, 1965: Endemic*, AN (Huaráz)
Subgenus: *Zethusculus* de Saussure, 1855
919. *brasiliensis* subsp. *fuscatus* R. Bohart & Stange, 1965: CU (Cusco), HU (Tingo María), JU (La Merced), LO (Iquitos, Putumayo),
920. *carbonarius* F. Smith, 1857: HU (Tingo María)
921. *imperfectus* Fox, 1899: HU (Tingo María), LO (Pebas)
922. *magnus* de Saussure, 1852: LO (Iquitos)
923. *mexicanus* subsp. *lugubris* Perty, 1833: CU, LO
924. *mexicanus* subsp. *mexicanus* (Linnaeus, 1758): LO
925. *romandinus* de Saussure, 1852: HU (Llullapichis), UC (Pucallpa)
926. *westwoodi* de Saussure, 1852: CA (Jaén), LA (Chongoyape, Lambayeque), LI (Chancay), LL (Simbal), PI (Talara)

Masarinae
Gayellini
Paramasaris Cameron, 1901 [Carpenter 2001, Carpenter *et al.* 2006]
927. *cupreus* Giordani Soika, 1974: UC (Pucallpa)
Masarini
Trimeria de Saussure, 1854 [Richards 1962, Carpenter 2001, Carpenter *et al.* 2006]
928. *cockerelli* (Bequaert, 1928): Endemic*, LL, PI (Paita)

Polistinae
Epiponini
Agelaia Lepeletier de Saint Fargeau, 1836, (=*Stelopolybia* Ducke, 1910, =*Gymnopolybia* Ducke, 1914) [Cooper 2000b, 2001]
929. *angulata* subsp. *angulata* (Fabricius, 1804): CU, HU (Llullapichis), JU (La Merced), LO
930. *cajennensis* (Fabricius, 1798): CU, HU (Llullapichis, Tingo María), JU (Chanchamayo), LO
931. *centralis* Cameron, 1907: HU (Llullapichis, Tingo María), JU (Chanchamayo), LO, PA, SM, UC, (=*fulvanceps* Bequaert, 1944, =*myrmecophila* in Richards, 1978)
932. *cornelliana* subsp. *cornelliana* (Richards, 1943): *, JU (Huacapistana, Oreja de Capelo)
933. *cornelliana* subsp. *subterranea* Richards, 1978: *, CU (Cosñipata, Machu Picchu), HU (Sinchona), PA (Oxapampa)
934. *flavipennis* (Ducke, 1905): HU (Llullapichis), JU, LO, MD, SM
935. *fulvofasciata* (DeGeer, 1773): CU, HU (Llullapichis), JU (Chanchamayo), LO, SM, (=*vulgaris* Ducke, 1904)
936. *hamiltoni* Richards, 1978: JU (Chanchamayo), UC (Pucallpa)
937. *lobipleura* subsp. *lobipleura* Richards, 1978: *, CU (Paucartambo), HU (Tingo María), JU (Chanchamayo), PA (Oxapampa), UC (B Abad)

938. *lobipleura* subsp. *melanogaster* Richards, 1978: Endemic*, HU (Previsto)
939. *multipicta* (Haliday, 1836): HU, LO
940. *myrmecophila* (Ducke, 1905): HU (Tingo María)
941. *nigrescens* Cooper, 2001: JU (San Ramón)
942. *ornata* (Ducke, 1905): CU, HU (Llullapichis), JU (San Luis de Shuaro), LO
943. *pallidiventris* (Richards, 1978): HU, JU, PA
944. *pallipes* subsp. *festae* (Zavattari, 1906): *, AM, CA, CU, HU (Tingo María), JU (La Merced, Oreja de Capelo), LO, PI, SM, UC (Pucallpa), (=*cuzcoensis* Schrottky, 1911)
945. *pallipes* subsp. *pallipes* (Olivier, 1791): LO
946. *panamaensis* (Cameron, 1906): CU, HU
947. *testacea* (Fabricius, 1804): HU (Llullapichis), JU (Chanchamayo), LO, SM

Angiopolybia Araujo, 1946 [Andena *et al.* 2007]

948. *pallens* (Lepeletier de Saint Fargeau, 1836): CU, HU (Llullapichis, Tingo María, Yurac), JU (Chanchamayo), PA (Oxapampa), SM
949. *paraensis* (Spinola, 1851): CU, HU (Yurac), JU (Perené, San Luis de Shuaro), LO, MD (Avispas), PA
950. *zischkai* Richards, 1978: CU (Marcapata), HU (Divisoria), JU (Chanchamayo), PA (Oxapampa), UC (Pucallpa)

Apoica Lepeletier de Saint Fargeau, 1836 [Pickett & Wenzel 2007]

Subgenus: *Apoica* Lepeletier de Saint Fargeau, 1836

951. *albimacula* (Fabricius, 1804): AM (Pomacochas), CU (Cosñipata)
952. *flavissima* van der Vecht, 1973: CU, HU (Llullapichis, Tingo María), LO, MD (Puerto Maldonado), UC (Pucallpa)
953. *gelida* van der Vecht, 1972: CU, HU (Tingo María), JU, LO
954. *pallens* (Fabricius, 1804): CU (Urubamba), HU, JU (San Luis de Shuaro), LO
955. *pallida* (Olivier, 1791): HU, JU (Satipo), LO, PA (Oxapampa), UC (Yarinacocha)
956. *strigata* Richards, 1978: *, CU (Cosñipata, Santa Ana), HU (Llullapichis, Monzón, Pachitea, Tingo María), JU (Chanchamayo, Oreja de Capelo, San Ramón), LO (Iquitos), UC (Pucallpa)
957. *thoracica* du Buysson, 1906: CU, HU (Chinchao, Llullapichis), JU (Chanchamayo), LO, PA (Oxapampa), SM, UC

Subgenus: *Deuterapoica* Dalla Torre, 1904

958. *arborea* de Saussure, 1854: CU, HU (Monzón), JU (San Ramón), LO

Asteleoeca Raw, 1985 [Carpenter *et al.* 2004]

959. *traili* (Cameron, 1906): LO
960. *ujhelyii* (Ducke, 1909): HU (Pachitea, Tingo María), LO (Rio Sucusari), (=*traili* in García 1978)

Brachygastra Perty, 1833, (=*Nectarina* Swainson & Shuckard, 1840) [Naumann 1968]

961. *augusti* (de Saussure, 1854): AY (Luisiana), CA (Jaén), HU (Divisoria, Llullapichis, Pachitea, Tingo María, Yurac), JU (La Merced, San Ramón),

LO (Iquitos, Nuevo Requena), PA (Iscozacín), PI (Suyo, Zapayal), SM, UC (Neshuya), (=*quinta* R. von Ihering, 1903)

962. *baccalaurea* (R. von Ihering, 1903): *, CU, JU (Huacapistana, Oreja de Capelo)

963. *bilineolata* Spinola, 1841: CA (San Ignacio), LO, PA (Dos de Mayo, Pichis)

964. *buyssoni* (Ducke, 1905): HU (Tingo María), LO (Iquitos, Pebas)

965. *fistulosa* Naumann, 1968

966. *lecheguana* (Latreille, 1824): CA, LA (Motupe, Pacasmayo), LL (San Pedro de Lloc), PI (Amotape, Morropón, Suyo), TU (Tumbes)

967. *moebiana* (de Saussure, 1867): JU (Chanchamayo), LO (Iquitos)

968. *propodealis* Bequaert, 1943: *, HU (Tingo María), LO, PA (Iscozacín), UC (Pucallpa)

969. *scutellaris* (Fabricius, 1804): CU (Cosñipata, Marcapata, Santa Isabel), HU (Tingo María), JU (La Merced, Perené, Satipo), LO (Iquitos, Pebas), PA (Pichis), SM, (=*scutellaris* var. *gribodoi* du Buysson, 1905)

970. *smithii* (de Saussure, 1854): LO (Putumayo)

Chartergellus Bequaert, 1938

971. *amazonicus* Richards, 1978: (=*frontalis* in Weyrauch 1943)

972. *nigerrimus* Richards, 1978: no locality given

973. *punctatior* Richards, 1978: *, HU (Cayumba, Tingo María), JU, PA (Oxapampa)

974. *zonatus* Spinola, 1851: LO (Iquitos)

Charterginus Fox, 1898 [Andena *et al.* 2009]

975. *fulvus* Fox, 1898: AP, CU, HU, LO (Yurimaguas), SM, UC (Pucallpa)

976. *weyrauchi* Richards, 1978: Endemic*, HU (Sinchona)

Chartergus Lepeletier de Saint Fargeau, 1836

977. *artifex* (Christ, 1791): HU (Llullapichis), LO, (=*chartarius* Olivier, 1792)

Clypearia de Saussure, 1854, (=*Occipitalia* Richards, 1978) [Carpenter *et al.* 1996]

978. *apicipennis* (Spinola, 1851): HU (Pachitea)

979. *duckei* Richards, 1978: HU

980. *sulcata* (de Saussure, 1854): LO (Amazonas-Napo)

981. *weyrauchi* Richards, 1978: *, HU (Tingo María), UC (B Abad)

Epipona Latreille, 1802 [Cooper 2002]

982. *media* Cooper, 2002: *, CU (Cosñipata), HU (Tingo María), JU (Chanchamayo), MD (Avispas), UC (Pucallpa), (=*quadrituberculata* in Richards 1978)

983. *niger* (Brèthes, 1926): HU

984. *tatua* (Cuvier, 1797): CU, HU (Llullapichis, Tingo María), LO, SM

Leipomeles Möbius, 1856

985. *dorsata* (Fabricius, 1804): CU, HU, JU (Satipo), LO, MD

986. *pusilla* (Ducke, 1904)

987. *spilogastra* (Cameron, 1912): HU (Pachitea), JU, UC, (=*nana* de Saussure, 1864)

Metapolybia Ducke, 1905

988. *acincta* Richards, 1978: HU (Llullapichis, Tingo María), UC (Pucallpa)

989. *aztecoides* Richards, 1978: JU (Satipo)

990. *cingulata* (Fabricius, 1804): CU, HU, JU (Huacapistana, La Merced, Mariposa, Satipo), SM, UC

991. *decorata* (Gribodo, 1896): *, LO, UC

992. *docilis* Richards, 1978: HU (Divisoria, Pachitea), JU (Huacapistana, Mariposa, San Luis de Shuaro), PA (Oxapampa)

993. *suffusa* (Fox, 1898): HU (Pachitea, Tingo María), JU (San Luis de Shuaro)

994. *unilineata* (R. von Ihering, 1904): HU (Pachitea)

Parachartergus R. von Ihering, 1904 [Cooper 2000a]

995. *amazonensis* Ducke, 1905: LO (La Sombra), UC (Atalaya, Pucallpa), (=*fulgidipennis* de Saussure, 1854, *sensu* Richards 1978)

996. *colobopterus* (Lichtenstein, 1796): PI

997. *flavofasciatus* (Cameron, 1906): PA (Puerto Bermúdez), UC (Atalaya)

998. *fraternus* (Gribodo, 1892): HU (Llullapichis), JU (Chanchamayo, San Ramón), LO

999. *fulgidipennis* (de Saussure, 1854): CU (Cosñipata), (=*fasciipennis* Ducke, 1905)

1000. *griseus* (Fox, 1898): LO (La Sombra)

1001. *smithii* (de Saussure, 1854): HU (Pachitea, Tingo María), JU (Chanchamayo), PI (Morropón, Suyo), SM, UC (Pucallpa)

1002. *wagneri* du Buysson, 1904: LO (La Sombra)

1003. *weyrauchi* Willink, 1959: *, CU, HU (Divisoria), JU, LO, PA (Oxapampa), (=*decipiens* Willink, 1959)

Polybia Lepeletier de Saint Fargeau, 1836 [Cooper 1993]

Subgenus: *Alpha* de Saussure, 1854

1004. *bifasciata* de Saussure, 1854: CU, HU (Yurac), JU, SM, (=*heydeniana* de Saussure, 1864)

1005. *quadricincta* de Saussure, 1854: HU (Tingo María), JU (Chanchamayo, La Merced, Oreja de Capelo, San Ramón), LO, SM, (=*bifasciata* var. *mellipennis* Bequaert, 1943, =*bifasciata* var. *restrepoensis* Bequaert, 1943, =*bifasciata* var. *xanthopyga* Bequaert, 1943)

1006. *signata* Ducke, 1905: LO (Iquitos)

Subgenus: *Apopolybia* Richards, 1978

1007. *jurinei* de Saussure, 1854: CU, HU (Llullapichis, Tingo María), JU (Chanchamayo), LO, MD, SM

Subgenus: *Cylindroeca* Richards, 1978

1008. *dimidiata* (Olivier, 1791): AP, HU (Llullapichis, Tingo María), JU (Satipo), SM

Subgenus: *Formicicola* Richards, 1978

1009. *rejecta* (Fabricius, 1798): CU (Huadquiña, Santa Ana), HU (Llullapichis, Tingo María), JU (Chanchamayo, Perené), LO, SM, (=*belizensis* Cameron, 1906)

Subgenus: *Furnariana* Richards, 1978

1010. *furnaria* R. von Ihering, 1904: HU (Pachitea)

1011. *richardsi* Cooper, 1993: LO (Nanay)

Subgenus: *Myrapetra* White, 1841

1012. *aequatorialis* subsp. *aequatorialis* Zavattari, 1906: HU (Carpish)

1013. *belemensis* subsp. *belemensis* Richards, 1970: SM

1014. *bistriata* (Fabricius, 1804): AP, CU, HU (Tingo María), JU (Chanchamayo), LO

1015. *catillifex* Möbius, 1856: CU (Marcapata), HU (Tingo María), JU (Chanchamayo, San Ramón), LO, SM, (=*septentrionalis* R. von Ihering, 1904)

1016. *diguetana* du Buysson, 1905: CU, HU (Llullapichis), LO, PA, SM

1017. *dimorpha* Richards, 1978: CU (Cosñipata)

1018. *divisoria* Richards, 1978: HU (Divisoria, Sinchona)

1019. *fastidiosuscula* de Saussure, 1854: *, CA, HU, JU, LA, LL, PI, SM (La Masa), TU

1020. *ficaria* Richards, 1978: Endemic*, CA (Celendin)

1021. *flavifrons* subsp. *barbatula* Richards, 1978: *, CA, HU, LA (Guadelupe, Olmos), LL (Chicama, San Pedro de Lloc, Trujillo), PI (Morropón, Piura, Suyo, Zapayal), TU (Pocitos, Tumbes)

1022. *flavifrons* subsp. *hecuba* Richards, 1951: CU (Machu Picchu)

1023. *juruana* R. von Ihering, 1904: AP, CU (Quillabamba, Santa Ana), JU (Chanchamayo, La Merced), PA, UC (Pucallpa)

1024. *occidentalis* subsp. *bohemani* Holmgren, 1868): HU, UC

1025. *occidentalis* subsp. *occidentalis* (Olivier, 1791): HU (Sinchona), LO, SM, UC (Pucallpa)

1026. *occidentalis* subsp. *venezuelana* Giordani Soika, 1965: TU (Estero Bendito)

1027. *platycephala* subsp. *platycephala* Richards, 1951: HU, LO

1028. *platycephala* subsp. *sylvestris* Richards, 1978: JU, UC (B Abad, Pucallpa)

1029. *scrobalis* subsp. *pronotalis* Richards, 1978

1030. *scrobalis* subsp. *scrobalis* Richards, 1970: CU, HU, LO

Subgenus: *Pedothoeca* Richards, 1978

1031. *brunnea* (Curtis, 1844): JU

1032. *emaciata* Lucas, 1879: CU (Santa Ana), HU (Llullapichis, Pachitea, Tingo María), JU (Chanchamayo, La Merced, Satipo), LO (Nuevo Requena), SM, UC (Neshuya, Pucallpa)

1033. *singularis* Ducke, 1905: HU (Pachitea), LO (Nuevo Requena), UC (Neshuya, Pucallpa)

Subgenus: *Platypolybia* Richards, 1978

1034. *incerta* Ducke, 1907: AY (San Miguel), HU (Previsto, Sinchona), JU (Satipo), PA (Oxapampa), (=*incerta* var. *weyrauchi* Bequaert, 1943)

1035. *procellosa* subsp. *dubitata* Ducke, 1910: CU, HU, JU (Satipo), LO

1036. *procellosa* subsp. *procellosa* Zavattari, 1906: JU (Perené), PA (Pichis)

Subgenus: *Polybia* Lepeletier de Saint Fargeau, 1836

1037. liliacea (Fabricius, 1804): CU, HU (Llullapichis), LO
1038. striata (Fabricius, 1787): AP, CU (Urubamba), HU (Llullapichis), JU (La Merced, Oreja de Capelo), LO, MD, PA (Oxapampa), SM
Subgenus: *Synoecoides* Ducke, 1905
1039. depressa Ducke, 1905: UC (Pucallpa)
Subgenus: *Trichinothorax* Carpenter & Day, 1988, (=*Trichothorax* Richards, 1978)
1040. batesi Richards, 1978: PA (Puerto Bermúdez)
1041. eberhardae Cooper, 1993: HU (Previsto), JU (Chanchamayo), UC (B Abad, Pucallpa)
1042. flavitincta Fox, 1898: CU
1043. gorytoides subsp. *sculpturata* Ducke, 1904: LO
1044. ignobilis (Haliday, 1836): AM, CA, CU (Machu Picchu), JU (Satipo), LA (Chiclayo, Motupe), LO, PI (Morropón, Piura), PU, SM (Tarapoto), TU (Tumbes), (=*nigra* de Saussure, 1858, ="*negra*" Weyrauch, 1943)
1045. micans Ducke, 1904: HU (Llullapichis, Previsto, Sinchona), JU (Chanchamayo, Perené), PA (Pichis), UC (B Abad, Pucallpa)
1046. rufitarsis subsp. *peruviana* Bequaert, 1943: *, CU, HU (Previsto, Tingo María), JU (Satipo), LO, PA (Oxapampa)
1047. sericea (Olivier, 1791): CA, CU (Santa Ana)
1048. tinctipennis subsp. *tinctipennis* Fox, 1898: HU (Llullapichis), JU (San Ramón), LO, SM
1049. velutina Ducke, 1905: CU, HU, JU (Chanchamayo), LO, SM, UC (Pucallpa)

Protopolybia Ducke, 1905, (=*Pseudochartergus* Ducke, 1905) [Carpenter & Wenzel 1990, Silveira & Carpenter 1995]

1050. acutiscutis (Cameron, 1907): HU, JU (Chanchamayo), PA (Oxapampa), LO
1051. amarella Bequaert, 1944: HU (Llullapichis, Pachitea, Tingo María), UC (Pucallpa)
1052. bella (R. von Ihering, 1903): HU, JU (San Ramón)
1053. biguttata Bequaert, 1944: Endemic*, JU (Chanchamayo, Perené)
1054. bituberculata Silveira & Carpenter, 1995: LO (Iquitos, Sucusari)
1055. chanchamayensis Bequaert, 1944: Endemic*, HU, JU (Chanchamayo, Perené, San Ramón), SM
1056. chartergoides subsp. *boshelli* Bequaert, 1938: HU (Iparía, Llullapichis, Tingo María), JU, UC (Pucallpa)
1057. chartergoides subsp. *chartergoides* (Gribodo, 1891): CU, HU (Llullapichis, Tingo María), JU (Chanchamayo), LO
1058. emortualis (de Saussure, 1855): HU (Llullapichis, Tingo María), LO
1059. exigua subsp. *binominata* (Schulz, 1906): CU (Cosñipata), HU (Pachitea, Tingo María), JU (Satipo)
1060. exigua subsp. *exigua* (de Saussure, 1854): HU (Iparía), JU (La Merced), LO (Iquitos), (=*punctulata* Ducke, 1907)

1061. fuscatus (Fox, 1898): AP, HU, JU (Perené), LO
1062. iheringi Ducke, 1910: Endemic*, AP, CU (Marcapata)
1063. minutissima (Spinola, 1851): HU, JU (Chanchamayo), LO
1064. nitida (Ducke, 1904): HU (Pachitea)
1065. rubrithorax Bequaert, 1944: Endemic*, HU (Tingo María)
1066. sedula (de Saussure, 1854): HU (Llullapichis, Tingo María), JU, LO, PA (Oxapampa), (=*pumilla* in Weyrauch 1943)
1067. weyrauchi Bequaert, 1944: Endemic*, JU (San Ramón)

Pseudopolybia de Saussure, 1863 [Andena *et al.* 2007]
1068. compressa (de Saussure, 1854): CU, HU, JU (Perené, San Ramón), LO (La Chorrera), MD (Tambopata), (=*luctuosus* F. Smith, 1857, =*laticinctus* Ducke, 1904)
1069. difficilis (Ducke, 1905): LO (La Chorrera, Putumayo)
1070. vespiceps (de Saussure, 1864): JU, LO, PA (Oxapampa), (=*vespiceps* var. *testacea* Ducke, 1907)

Synoeca de Saussure, 1852
1071. chalibea de Saussure, 1852: AP, CU (Vilcanota), HU (Llullapichis, Pachitea, Tingo María), JU (Satipo), LO, PA, (=*irina* var. *splendens* du Buysson, 1906)
1072. septentrionalis Richards, 1978: PI (Suyo, Zapayal), TU (La Palma, Papayal, Pocitos, Tumbes), ("Las Virgenes", "Tambillo")
1073. surinama (Linnaeus, 1767): HU (Llullapichis, Tingo María), JU (Chanchamayo), LO, UC (Pucallpa)
1074. virginea (Fabricius, 1804): CU, HU (Llullapichis, Tingo María)

Mischocyttarini

Mischocyttarus de Saussure, 1853 [Cooper 1996ab, 1997ab, 1998ab, Oliveira 2006]
Subgenus: *Clypeopolybia* Brèthes, 1923
1075. carbonarius subsp. *carbonarius* (de Saussure, 1854): HU (Llullapichis), LO
1076. flavicans subsp. *flavicans* (Fabricius, 1804): AM, HU (Iparía), LO
1077. woytkowskyi Richards, 1978: Endemic*, CU (Cosñipata)
Subgenus: *Haplometrobius* Richards, 1978
1078. chanchamayoensis Richards, 1978: *, JU (Chanchamayo, San Ramón), PA (Pozuzo)
1079. decimus Richards, 1978
1080. dimorphus Zikán, 1949: Endemic*, JU (Chanchamayo)
1081. elegantulus Zikán, 1949: *, HU (Tingo María)
1082. filipendulus Cooper, 1998: LO (Nanay)
1083. illusorius Richards, 1978: *, CU (Santa Ana)
1084. interruptus Richards, 1978: LO (Nanay)
1085. longicornis Zikán, 1949: Endemic*, PA (Oxapampa)
1086. melanoleucus Richards, 1978: Endemic*, HU (Previsto), UC (Pucallpa)
1087. melanoxanthus Richards, 1978
1088. minifoveatus Cooper, 1998: Endemic*, JU (San Ramón)

1089. mifificus Zikán, 1949
1090. montivagus Cooper, 1996: *, PA (Villa Rica)
1091. nigropygialis Zikán, 1949: Endemic*, JU (Oreja de Capelo), PA (Oxapampa)
1092. ornatus Zikán, 1949: *, JU (Oreja de Capelo, San Ramón)
1093. peruanus Zikán, 1949: Endemic*, CU (Santa Ana)
1094. peruviensis Richards, 1945: *, JU (Perené), PA (Pozuzo)
1095. reflexicollis Zikán, 1949: *, HU (Tingo María)
1096. silvicola Zikán, 1949: *, HU (Previsto), JU (San Ramón)
1097. surinamensis subsp. *surinamensis* (de Saussure, 1854): JU
1098. synoecus Richards, 1940: LO
1099. tectus Cooper, 1996: HU (Tingo María)
1100. tenuis Richards, 1945: Endemic*, CU, HU (Tingo María)
1101. weyrauchi Zikán, 1949: *, HU (Tingo María), JU (San Luis de Shuaro)
1102. xanthocerus Richards, 1945: HU (Tingo María)

Subgenus: *Kappa* de Saussure, 1853

1103. imitator (Ducke, 1904): HU (Tingo María), JU (Chanchamayo, Perené), LO (Tapiche), MD (Cocha Cashu), UC (Acobamba), (=*communalis* Richards, 1978)
1104. injucundus (de Saussure, 1854): *, CU?, HU (Previsto, Tingo María), JU (Satipo), LO (Iquitos, Rio Sucusari), UC (Pucallpa), (=*tingomariae* Richards, 1978)
1105. latissimus Richards, 1978: *, LO (Iquitos)
1106. metathoracicus (de Saussure, 1854): LO (Iquitos, Tapiche)
1107. mysticus Oliveira, 2006: Endemic*, no locality given
1108. paris Silveira, 2006: Endemic*, MD (Avispas)
1109. pseudomimeticus (Schulz, 1904): HU (Llullapichis), LO (Iquitos)
1110. schunkei Zikán, 1949: Endemic*, JU (Chanchamayo)

Subgenus: *Megacanthopus* Ducke, 1904

1111. malaris Richards, 1978: *, LO (Cerro Azul, Contamana)
1112. melanopygus Richards, 1945: *, JU (La Merced, San Luis de Shuaro, San Ramón, Satipo), LO (Iquitos)
1113. saturatus Zikán, 1949: *, HU (Tingo María), JU (La Merced)

Subgenus: *Mischocyttarus* de Saussure, 1853

1114. cinerasceus Zikán, 1949: Endemic*, JU (Oreja de Capelo), PA (Oxapampa)
1115. drewseni subsp. *andinus* Zikán, 1949: *, AP (Abancay), AY (Ayacucho, Huanta, Ninabamba, San Miguel), CA, CU (Urubamba), HU (Huánuco), HV (Anco), JU
1116. drewseni subsp. *drewseni* de Saussure, 1857: AY, CU, LO
1117. gynandromorphus Richards, 1945: *, JU (Perené), PA (Pichis)
1118. labiatus (Fabricius, 1804): AM, HU (Llullapichis), HV, JU, LO, MD
1119. mattogrossoensis Zikán, 1935: CU, (=*drewseni* subsp. *steinbachi* Richards, 1945)
1120. rotundicollis (Cameron, 1912): AP (Abancay), AY (Luisiana, Ninabamba, Pampas, San Miguel, San Francisco, Sivia), CU, HU (Huánuco, Pachitea),

JU (Chanchamayo, San Ramón, Satipo), PA, UC (Neshuya), (=*fumigatus* Zikán, 1949, =*fumigatoides* Zikán, 1949)

1121. *smithii* de Saussure, 1853: LO

1122. *tomentosus* Zikán, 1935: AM, HU (Llullapichis), JU (Chanchamayo, La Merced, San Luis de Shuaro, Satipo), LO, (=*gibbicollis* Zikán, 1949)

Subgenus: *Monogynoecus* Richards, 1941

1123. *foveatus* Richards, 1941: UC (B Abad)

1124. *insolitus* Zikán, 1949: HU (Carpish)

1125. *lecointei* Ducke, 1904

Subgenus: *Omega* de Saussure, 1854, (=*Monacanthocnemis* Ducke, 1905)

1126. *vaqueroi* Zikán, 1949: *, HU (Tingo María), PA (Pozuzo)

Subgenus: *Phi* de Saussure, 1854, (=*Monocyttarus* Richards, 1978)

1127. *barbatulus* Richards, 1978: *, HU (Chinchao)

1128. *commixtus* Richards, 1978: Endemic*, JU (Oreja de Capelo), PA (Dos de Mayo, Pichis), (=*spadiceus* Zikán, 1949)

1129. *flavicornis* subsp. *nigricornis* Zikán, 1949: *, CU (Santa Ana), HU (Tingo María), JU (La Merced, San Ramón, Satipo), LO, PA (Oxapampa), (=*rufescens* Zikán, 1949)

1130. *flavoniger* Zikán, 1949: *, JU (Oreja de Capelo, San Ramón)

1131. *hirtulus* Zikán, 1949: Endemic*, JU (Huacapistana), (=*hirtuloides* Zikán, 1949)

1132. *imeldai* Zikán, 1949: *, JU (Chanchamayo)

1133. *inca* Zikán, 1949: Endemic*, no locality given

1134. *oreophilus* Zikán, 1949: *, CU (Machu Picchu)

1135. *peduncularius* Zikán, 1949: Endemic*, JU (Chanchamayo)

1136. *petiolatus* Zikán, 1949: *, CA (Jaén, San Ignacio), PI (Piura)

1137. *piceus* Zikán, 1949: Endemic*, JU (Chanchamayo), PA (Oxapampa), (=*fusconiger* in Weyrauch)

1138. *rufipes* Zikán, 1949: Endemic*, JU (Huacapistana)

1139. *tarmensis* Richards, 1945: Endemic*, JU (Huacapistana, Oreja de Capelo), (=*huacapistanus* Zikán, 1949, =*huacapistanoides* Zikán, 1949)

1140. *transandinus* Richards, 1978: Endemic*, LA (Olmos)

Subgenus: *Scytokeraia* Cooper, 1997

1141. *moralesi* Zikán, 1949: *, JU (Oreja de Capelo, San Ramón)

1142. *rhadinomerus* Cooper, 1997: Endemic*, AM (Rodríguez de Mendoza)

1143. *subornatus* Zikán, 1949: Endemic*, JU (San Ramon), PA (Oxapampa, Villa Rica)

Polistini

Polistes Latreille, 1802

Subgenus: *Aphanilopterus* Meunier, 1888

1144. *adelphus* Richards, 1978: TU (Tumbes)

1145. *aterrimus* de Saussure, 1853: AM (Pomacochas), AR, CU (Machu Picchu), HU (Chinchao), JU (Huacapistana, La Merced, Oreja de Capelo, Pichita, Tarma, San Ramón,), PA (Oxapampa)

1146. bicolor Lepeletier de Saint Fargeau, 1836: CU, HU (Llullapichis), JU (Chanchamayo, Perené), LO (Iquitos), SM, (=*sosia* Bequaert, 1937)
1147. billardieri subsp. *biglumoides* Ducke, 1904: AY (Ninabamba), CU, HU (Huánuco)
1148. canadensis subsp. *canadensis* (Linnaeus, 1758): CA (Celendin), CU (Urubamba), HU (Ambo, Huánuco, Tingo María), JU (Satipo), (=*panamensis* Holmgren, 1869)
1149. carnifex subsp. *boliviensis* Bequaert, 1936: JU (Chanchamayo, Perené)
1150. carnifex subsp. *carnifex* (Fabricius, 1775): LO, SM, UC
1151. claripennis Ducke, 1904: LO (Iquitos), UC (B Abad), (=*synoecoides* Ducke, 1907)
1152. deceptor Schulz, 1905: HU (Sinchona, Jumbatis), JU (La Merced, Perené, San Luis de Shuaro, San Ramón, Satipo), LI (Chosica), MD (Iberia)
1153. erythrocephalus Latreille, 1813: HU, MD
1154. goeldii Ducke, 1904: HU (Llullapichis, Tingo María), JU (Chanchamayo, Satipo), LO
1155. huacapistana Richards, 1978: Endemic*, JU (Huacapistana)
1156. infuscatus subsp. *anduzei* Bequaert, 1943: CU (Callanga)
1157. infuscatus subsp. *infuscatus* Lepeletier de Saint Fargeau, 1836: AM, JU (La Merced)
1158. lanio subsp. *lanio* (Fabricius, 1775): CA, CU, HU (Llullapichis), JU, LO
1159. major subsp. *weyrauchi* Bequaert, 1936: *, CA, HU (Huánuco), JU (Oreja de Capelo, San Ramón), LO
1160. maranonensis Willink, 1964: CA (Bellavista, Cajamarca, Celendin, Chontabamba, Chusgón, Jaén, Lajas, Limón, San Ignacio, Sunchubamba), (=*versicolor* var. *flavescens* Weyrauch, 1943 *nomen nudum*)
1161. ninabamba Richards, 1978: Endemic*, AY (Ninabamba)
1162. occipitalis Ducke, 1904: HU, JU (Satipo), LO (Iquitos)
1163. pacificus Fabricius, 1804: HU (Tingo María), JU (Satipo), LO (La Chorrera, Putumayo), PA (Pozuzo), UC (Pucallpa), (=*flavopictus* Ducke, 1918, = *liliaciosus* de Saussure, 1854, =*modestus* F. Smith, 1862)
1164. peruvianus Bequaert, 1934: Endemic*, AN, AR (Arequipa), IC (Chincha, Palpa), LA (Chiclayo, Pacasmayo), LI (Cañete, Chosica, Huaura, San Bartolomé, Verrugas), LL (San Pedro de Lloc, Trujillo), PI
1165. rufiventris Ducke, 1904: LO
1166. testaceicolor Bequaert, 1937: HU, JU (La Merced, San Ramón), LO, (=*analis* Fabricius, 1798)
1167. versicolor subsp. *flavoguttatus* Bequaert, 1934: CU (Santa Ana, Mándor), MD
1168. versicolor subsp. *versicolor* (Olivier, 1791): AP (Abancay, Curahuasi), AY (Huanta, Luisiana, Ninabamba, San Francisco, San Miguel, Sivia, Teresita), CA (Querocotillo), CU (Limatambo, Pichari), HU (Pachitea, Tingo María), HV (Anco, Campo Armiño), JU (Chanchamayo, Pampa Silva,

San Ramón, Satipo), LA (Motupe), LO (Nuevo Requena), PA (Oxapampa), PI (Morropón, Piura, Talara, Zapayal), SM (Tarapoto), TU (Tumbes), UC (Cachi, Neshuya, Pucallpa), (=*versicolor* var. *vulgaris* Bequaert, 1934)

1169. *weyrauchorum* Willink, 1964: *, AN (Cajacay, Yungay), AY (San Pedro), AR (Arequipa, Atiquipa, Camaná, Caravelí, Ocoña), CA (Cascas, Chilete, Limón, Tembladera), IC (Ica, Pisco), LA (Chiclayo, Guadelupe, Motupe), LI (Atocongo, Cañete, Chillón, Chosica, Churín, Cocayalta, Huaura, Huinco, La Molina, Lachay, Lima, Matucana, Q. Verde, Quilmaná, Pachacámac, Pueblo Libre, Verrugas, San Bartolomé, Santa Eulalia, Santa Rosa de Quives, Surco), LL (Cartavio, Chan-chan, Chicama, Pacasmayo, Paiján, San Pedro de Lloc, Trujillo), PI (Paita), TA (Tacna)

1170. *xanthogaster* subsp. *willei* Bequaert, 1940: Endemic*, AP (Abancay), AY (Ayacucho, Cangallo, Chacco, Huatatas, Huanta, Ninabamba, Río Blanco, San Miguel), CU (Limatambo), HV (Anco, Colorado, La Mejorada, Mariño, Pachachaca, Santo Tomás)

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References

Ajmat MV, Willink A (1980) El género *Parazumia* Saussure (Hym. Eumenidae). Acta Zoologica Lilloana 36: 81-86.

Alencar IDCC, Azevedo CO (2006) Definition of the *coronatus* species-group (Hymenoptera: Bethylidae, *Dissomphalus*) with description of thirteen new species. Zootaxa 1330: 1-26.

Alencar IDCC, Azevedo CO (2008) A new species-group of *Dissomphalus* (Hymenoptera: Bethylidae), with description of thirteen new species. Zootaxa 1851: 1-28.

Allen HW (1972) A monographic study of the subfamily Tiphiinae (Hymenoptera: Tiphiidae) of South America. Smithsonian Contributions to Zoology 113: 1-76.

Amarante STP (2002) A synonymic catalog of the Neotropical Crabronidae and Sphecidae (Hymenoptera: Apoidea). Arquivos de Zoologia 37: 1-139.

Amarante STP (2005) Addendum and corrections to a synonymic catalog of Neotropical Crabronidae and Sphecidae. Papéis Avulsos de Zoologia 45: 1-18.

Amarante STP, Brandão CRF, Carpenter JM (1999) A new species of *Embolemus* Westwood from the Mata Atlântica of Brazil (Hymenoptera: Embolemidae). American Museum Novitates 3266: 1-7.

Andena SR, Noll FB, Carpenter JM (2009) Cladistic analysis of *Charterginus* Fox, 1898 (Hymenoptera, Vespidae, Epiponini). A neotropical genus of social wasps. Journal of Natural History 43: 1183-1193.

Andena SR, Noll FB, Carpenter JM, Zucchi R (2007) Phylogenetic analysis of the Neotropical social wasps of the genus *Angiopolybia* Araujo, 1946 (Hymenoptera, Vespidae, Epiponini). Zootaxa 1427: 57-64.

Andena SR, Noll FB, Carpenter JM, Zucchi R (2007) Phylogenetic analysis of the Neotropical *Pseudopolybia* de Saussure, 1863, with description of the male genitalia of *Pseudopolybia vespiceps* (Hymenoptera, Vespidae, Epiponini). American Museum Novitates 3586: 1-11.

Arbouw GJ (1985) Subfamily Tiphiinae. *Hymenopterum Catalogus* (*nova editio*) 18: 1-157.

Argaman Q (1988) Generic synopsis of Sclerogibbidae (Hymenoptera). Annales historico-naturales Musei Nationalis Hungarici (Termeszettudomanyi Muzeum evkonyve) 80: 177-187.

Argaman Q (1996) Generic synopsis of Scoliidae (Hymenoptera, Scolioidea). Annales historico-naturales Musei Nationalis Hungarici (Termeszettudomanyi Muzeum evkonyve) 88: 171-222.

Azevedo CO (1999) A key to world species of Scolebythidae (Hymenoptera: Chrysidoidea), with description of a new species of *Dominibythus* from Brazil. Journal of Hymenoptera Research 8: 1-5.

Azevedo CO (1999) Revision of the Neotropical *Dissomphalus* Ashmead, 1893 (Hymenoptera, Bethylidae) with median tergal processes. Arquivos de Zoologia 35: 301-394.

Azevedo CO (2001) Systematics of the Neotropical *Dissomphalus* Ashmead (Hymenoptera, Bethylidae) of the bicavitus group. Revista Brasileira de Entomologia 45: 173-205.

Azevedo CO (2003) Synopsis of the Neotropical *Dissomphalus* Ashmead (Hymenoptera, Bethylidae). Zootaxa 338: 1-74.

Azevedo CO (2008) Characterization of the types of the Neotropical *Pseudisobrachium* (Hymenoptera: Bethylidae), with a key to species. Revista Brasileira de Zoologia 25: 737-801.

Azevedo CO, Moreira AR, Kawada R (2005) Taxonomia de *Bakeriella* (Hymenoptera, Bethylidae) da Bolívia. Iheringia Série Zoologia (Porto Alegre) 95: 165-172.

Banks N (1944) The Psammocharidae (Hymenoptera) taken at Kartabo and other localities in British Guiana. Zoologica (New York) 29: 97-112.

Banks N (1946) Studies of South American Psammocharidae. Part I. Bulletin of the Museum of Comparative Zoology at Harvard College 96: 311-525.

Banks N (1947) Studies of South American Psammocharidae. Part II. Bulletin of the Museum of Comparative Zoology at Harvard College 99: 371-486.

Bohart RM (1979) *Tachytes* of South America (Hymenoptera, Sphecidae, Larrinae). Transactions of the American Entomological Society 104: 435-510.

Bohart RM (1985a) The *Chrysis gibba* species group in the new world (Hymenoptera, Chrysididae). Insecta Mundi 1: 91-97.

Bohart RM (1985b) New *Ipsiura* and a key to known species of the genus (Hymenoptera: Chrysididae). Journal of the Kansas Entomological Society 58: 708-720.

Bohart RM (1992) South American *Oxybelus* I. Notes on types of Spinola, F. Smith, Brèthes, Pate, and Schrottky (Hymenoptera, Sphecidae, Crabroninae). Insecta Mundi 6: 189-191.

Bohart RM (1993a) South American *Oxybelus* II. The *emarginatus* group (Hymenoptera, Sphecidae). Insecta Mundi 7: 19-26.

Bohart RM (1993b) South American *Oxybelus* III. The *uniglumis* and *scutellatus* groups (Hymenoptera, Sphecidae). Insecta Mundi 7: 65-76.

Bohart RM (1996) A review of the genus *Bicyrtes* (Hymenoptera: Sphecidae, Nyssoninae, Bembicini). Insecta Mundi 10: 139-152.

Bohart RM (2000) A review of Gorytini in the Neotropical region (Hymenoptera: Sphecidae: Bembecinae). International Contributions on Entomology 4: 111-259.

Bohart RM, Menke AS (1976) Sphecid wasps of the world: a generic revision. University of California Press, Berkeley, 695 pp.

Bohart RM, Stange LA (1965) A revision of the genus *Zethus* Fabricius in the Western Hemisphere (Hymenoptera: Eumenidae). University of California Publications in Entomology 40: 1-208.

Bolton B (1994) Identification guide to the ant genera of the world. Harvard University Press, Cambridge, Mass., 222 pp.

Bolton B (1995) A new general catalogue of the ants of the world. Harvard University Press, Cambridge, Mass., 504 pp.

Bradley JC (1944) A preliminary revision of the Pompilinae (exclusive of the tribe Pompilini) of the Americas (Hymenoptera: Pompilidae). Transactions of the American Entomological Society 70: 23-157.

Bradley JC (1945) The Scoliidae (Hymenoptera) of northern South America, with especial reference to Venezuela. -I. The genus *Campsomeris*. Boletin de Entomología Venezolana 4: 1-36.

Bradley JC (1972) Notes on the distribution of the genus *Plumarius* (Hymenoptera, Plumaridae). Entomological News 83: 135-139.

Brandão CRF (1991) Adendos ao catálogo abreviado das formigas da região Neotropical. Revista Brasileira de Entomologia 35: 319-412.

Brothers DJ (1999) Phylogeny and evolution of wasps, ants and bees (Hymenoptera, Chrysidoidea, Vespoidea and Apoidea). Zoologica Scripta 28: 233-249.

Cambra RA (1993) Checklist of Pompilidae and Sphecidae at the BIOLAT biological station, Pakitza, Rio Manu, Peru. Sphecos 24: 15-16.

Cambra RA, Azevedo CO (2003) First Central American record of *Clystopsenella longiventris* (Hymenoptera: Scolebythidae) with comments on the variation of the species. Entomotropica 18:147-148.

Cambra RA, Quintero D (2004) New species of *Xystromutilla* Andre (Hymenoptera: Mutillidae) and the first illustrated key for the males of the genus. Transactions of the American Entomological Society 130: 463-478.

Carpenter JM (1987) A review of the subspecies concept in the eumenine genus *Zeta* (Hymenoptera: Vespidae). Psyche 94: 253-259.

Carpenter JM (1999) Taxonomic notes on paper wasps (Hymenoptera: Vespidae; Polistinae). American Museum Novitates 3259: 1-44.

Carpenter JM (2001) Checklist of species of the subfamily Masarinae (Hymenoptera: Vespidae). American Museum Novitates 3325: 1-40.

Carpenter JM (2004) Synonymy of the genus *Marimbonda* Richards, 1978, with *Leipomeles* Möbius, 1856 (Hymenoptera: Vespidae; Polistinae), and a new key to the genera of paper wasps of the new world. American Museum Novitates 3465: 1-16.

Carpenter JM, Garcete-Barrett BR (2002) A key to the Neotropical genera of Eumeninae (Hymenoptera: Vespidae). Boletin del Museo Nacional de Historia Natural del Paraguay 14: 52-73.

Carpenter JM, Garcete-Barrett BR (2005) Revision of the genus *Parazumia* de Saussure (Hymenoptera: Vespidae; Eumeninae). Folia Entomológica Mexicana 44: 21-34.

Carpenter JM, Garcete-Barrett BR, Hermes MG (2006) Catalog of the Neotropical Masarinae (Hymenoptera, Vespidae). Revista Brasileira de Entomologia 50: 335-340.

Carpenter JM, Nascimento FS, Mateus S, Noll FB, Kojima JI (2004) A revision of the genus *Asteloeca* (Hymenoptera: Vespidae, Polistinae). American Museum Novitates 3427: 1-12.

Carpenter JM, Wenzel JW (1989) Synonymy of the genera *Protopolybia* and *Pseudochartergus* (Hymenoptera: Vespidae; Polistinae). Psyche 96: 177-186.

Carpenter JM, Wenzel JW, Kojima JI (1996) Synonymy of the genus *Occipitalia* Richards, 1978, with *Clypearia* de Saussure, 1854 (Hymenoptera: Vespidae; Polistinae, Epiponini). Journal of Hymenoptera Research 5: 157-165.

Carrasco F (1972) Catálogo de la familia Ichneumonidae Peruanos. Revista Peruana de Entomología 15: 324-332.

Coloma MV (1998) Contribución al conocimiento de los Pompilinae de Argentina (Hymenoptera: Pompilidae). V. – El género *Euplaniceps* Haupt. Acta Zoologica Lilloana 44: 143-165.

Cooper M (1996a) The subgenus *Monogynoecus* Richards of *Mischocyttarus* de Saussure (Hym., Vespidae, Polstinae) with descriptions of two new species. Entomologist's Monthly Magazine 132: 23-28.

Cooper M (1996b) The *mendax* group of *Mischocyttarus* (Hym., Vespidae, Polistinae) with descriptions of new species. Entomologist's Monthly Magazine 132: 273-280.

Cooper M (1997a) A new subgenus of *Mischocyttarus* de Saussure (Hym., Vespidae). Entomologist's Monthly Magazine 133: 117-129.

Cooper M (1997b) The subgenus *Megacanthopus* Ducke of *Mischocyttarus* de Saussure (Hym., Vespidae), with a key and three new species. Entomologist's Monthly Magazine 133: 217-223.

Cooper M (1998a) New species of the *artifex* group of *Mischocyttarus* de Saussure (Hym., Vespidae) with a partial key. Entomologist's Monthly Magazine 134: 293-306.

Cooper M (1998b) Two new species of *Mischocyttarus* (Hym., Vespidae) with notes on some members of the *iheringi* group. Entomologist's Monthly Magazine 134: 89-93.

Cooper M (1999) New species of *Metapolybia* Ducke (Hym., Vespidae, Polistinae). Entomologist's Monthly Magazine 135: 107-110.

Cooper M (2000a) A new species of *Parachartergus* R. von Ihering (Hym., Vespidae, Polistinae) with a key to the members of the *fulgidipennis* group and notes. Entomologist's Monthly Magazine 136: 121-126.

Cooper M (2000b) Five new species of *Agelaia* Lepeletier (Hym., Vespidae, Polistinae) with a key to members of the genus, new synonymy and notes. Entomologist's Monthly Magazine 136: 177-197.

Cooper M (2002) A new species of *Epipona* (Hym., Vespidae, Polistinae) with a key to the members of the genus. Entomologist's Monthly Magazine 138: 143-147.

Cumming JM (1989) Classification and evolution of the eumenine wasp genus *Symmorphus* Wesmael (Hymenoptera: Vespidae). Memoirs of the Entomological Society of Canada 148: 5-168.

Dalla Torre KW (1897) Catalogus Hymenopterorum. 8: Fossores (Spgegidae). Lipsiae, G. Engelmann, 749 pp.

Diez P, Fidalgo P, Roig-Alsina A (2007) A new genus and species of Plumariidae (Hymenoptera, Chrysidoidea) from western xeric Argentina. Zootaxa 1467: 35-41.

Dreisbach RR (1960) Seventeen new species in the genus *Priocnessus* (Hymenoptera: Psammocharidae) with keys to males and females of all known Neotropical species. American Midland Naturalist 63: 335-364.

Dreisbach RR (1961a) Additional new species of the genus *Priocnessus* Banks (Hymenoptera: Psammocharidae) with photomicrographs of genitalia of all the new males. American Midland Naturalist 65: 215-235.

Dreisbach RR (1961b) Eighteen new species in the genus *Calicurgus* Lepeletier (Hymenoptera: Psammocharidae) from Mexico, Central and South America with a key to all the species and photomicrographs of the male genitalia and subgenital plates. American Midland Naturalist 65: 360-380.

Dreisbach RR (1963) New species of spider wasps, genus *Auplopus*, from the Americas south of the United States (Hymenoptera: Psammocharidae). Proceedings of the United States National Museum 114: 137-211.

Escalante JA (1993) Especies de hormigas conocidas del Perú (Hymenoptera: Formicidae). Revista Peruana de Entomología 34: 1-13.

Evans HE (1950) A taxonomic study of the Nearctic spider wasps belonging to the tribe Pompilini (Hymenoptera: Pompilidae). Part II: genus *Anoplius* Dufour. Transactions of the American Entomological Society 76: 207-361.

Evans HE (1961) A reconsideration of the genus *Epipompilus* (Hymenoptera: Pompilidae). Psyche 68: 25-37.

Evans HE (1963) A revision of the genus *Apenesia* in the Americas (Hymenoptera, Bethylidae). Bulletin of the Museum of Comparative Zoology at Harvard College 130: 251-359.

Evans HE (1964) A synopsis of the American Bethylidae (Hymenoptera, Aculeata). Bulletin of the Museum of Comparative Zoology at Harvard College 132: 1-222.

Evans HE (1965a) A revision of the genus *Rhabdepyris* in the Americas (Hymenoptera, Bethylidae). Bulletin of the Museum of Comparative Zoology 133: 67-151.

Evans HE (1965b) Studies on Neotropical Pompilidae (Hymenoptera) I. The genus *Agenioideus* Ashmead in South America. Breviora 234: 1-7.

Evans HE (1966a) A revision of the genus *Anisepyris* Kieffer (Hymenoptera, Bethylidae). Studia Entomologica 9: 1-120.

Evans HE (1966b) Further studies on Neotropical Pristocerinae (Hymenoptera, Bethylidae). Acta Hymenopterologica 2: 99-117.

Evans HE (1966c) Further studies on Neotropical Epyrini (Hymenoptera, Bethylidae). Psyche 72: 265-278.

Evans HE (1966d) Discovery of the female *Plumarius* (Hymenoptera, Plumariidae). Psyche 73: 229-237.

Evans HE (1966e) A revision of the Mexican and Central American spider wasps of the subfamily Pompilinae (Hymenoptera: Pompilidae). Memoirs of the American Entomological Society 20: 1-442, 11 pls.

Evans HE (1966f) Studies on Neotropical Pompilidae (Hymenoptera) II. Genus *Aridestus* Banks. Psyche 73: 116-122.

Evans HE (1967a) New generic records of Bethylidae from South America (Hymenoptera). Proceedings of the Entomological Society of Washington 69: 269-272.

Evans HE (1967b) Studies on Neotropical Pompilidae (Hymenoptera) III. Additional notes on *Epipompilus* Kohl. Breviora 273: 1-15.

Evans HE (1968a) The genus *Scleroderma* in South America (Hymenoptera, Bethylidae). Papeis Avulsos de Zoologia 22: 103-106.

Evans HE (1968b) Studies on Neotropical Pompilidae (Hymenoptera) IV. Examples of dual sex-limited mimicry in *Chirodamus*. Psyche 75: 1-22.

Evans HE (1969a) Studies on Neotropical Pompilidae (Hymenoptera) V. *Austrochares* Banks. Psyche 76: 18-28.

Evans HE (1969b) Studies on Neotropical Pompilidae (Hymenoptera) VII. *Irenangelus* Schulz. Studia Entomologica 12: 417-431.

Evans HE (1969c) A revision of the genus *Epyris* in the Americas (Hymenoptera: Bethylidae). Transactions of the American Entomological Society 95: 181-352.

Evans HE (1973a) Studies on Neotropical Pompilidae (Hymenoptera) VIII. The genus *Aporus* Spinola in South America. Studia Entomologica 16: 353-370.

Evans HE (1973b) Studies on Neotropical Pompilidae (Hymenoptera) IX. The genera of Auplopodini. Psyche 80: 212-226.

Evans HE (1977) A revision of the genus *Holepyris* in the Americas (Hymenoptera: Bethylidae). Transactions of the American Entomological Society 103: 531-579.

Evans HE (1979) A reconsideration of the genus *Bakeriella* (Hymenoptera: Bethylidae). Journal of the New York Entomological Society 87: 256-266.

Fernández F (2000) Avispas cazadoras de arañas (Hymenoptera: Pompilidae) de la región Neotropical. Biota Colombiana 1: 3-24.

Fernández F, Rodriguez MA, Giovanni UD (1996) The first record of the family Sclerogibbidae (Hymenoptera: Chrysidoidea) from Colombia. Sphecos 30: 10.

Fernández F, Sarmiento CE, Campos DF (2002) First records of the wasps families Megalyridae and Scolebythidae (Hymenoptera: Megalyroidea, Chrysidoidea) for northern South America. Revista Colombiana de Entomología 28: 213.

Fernández F, Sharkey MJ (Eds) (2006) Introducción a los Hymenoptera de la Región Neotropical. Bogotá D.C., Sociedad Colombiana de Entomología y Universidad Nacional de Colombia, 894 pp.

Finnamore AT (1995) Revision of the world genera of the subtribe Stigmina (Hymenoptera: Apoidea: Sphecidae: Pemphredoninae), part 1. Journal of Hymenoptera Research 4: 204-284.

Finnamore AT. (2002) Revision of the world genera of tribe Stigmini (Hymenoptera: Apoidea: Crabronidae: Pemphredoninae), part 2. Species of *Incastigmus* Finnamore. Journal of Hymenoptera Research. 11: 12-71.

Garcete-Barrett BR (2001) La taxonomía del género *Cephalastor* Soika, parte I: el grupo *relativus* (Hymenoptera: Vespidae: Eumeninae). Boletin del Museo Nacional de Historia Natural del Paraguay 13: 5-26.

Garcete-Barrett BR (2002) La taxonomía del género *Cephalastor* Soika (Hymenoptera: Vespidae: Eumeninae), parte II. Boletin del Museo Nacional de Historia Natural del Paraguay 14: 80-97.

García RJ (1978) Cuatro estudios sobre avispas sociales del Peru (Hymenoptera: Vespidae). Revista Peruana de Entomología 21: 1-22.

Genise JF (1985) Las Anthoboscinae Neotropicales y comentarios sobre la diversidad de la subfamilia (Hymenoptera, Tiphiidae). Revista de la Sociedad Entomológica Argentina 43: 195-220.

Genise JF (1986) Las Bradynobaenidae y algunas modificaciones a la clasificacion general de Hymenoptera Aculeata. Physis. Sección C: Los Continentes y los Organismos Terrestres (Buenos Aires) 44: 39-53.

Genise JF (1992) Las especies conocidas de Tiphiidae (Hym. Tiphioidea) de la Argentina y paises vecinos. Revista Sociedad Entomologica Argentina 50: 277-329.

Genise JF, Kimsey LS (1991) New genera of South American Thynninae (Tiphiidae, Hymenoptera). Psyche 98: 57-69.

Genise JF, Kimsey LS (1993) Revision of the South American thynnine genus *Elaphroptera* Guérin-Méneville (Hymenoptera: Tiphiidae). Journal of Hymenoptera Research 2: 195-220.

Giordani Soika A (1958) Notulae Vespidologicae IV. Bollettino del Museo Civico di Storia Naturale di Venezia 11: 35-102.

Giordani Soika A (1961) Notulae Vespidologicae XVII-XVIII. Atti della Societa Italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano 100: 373-388.

Giordani Soika A (1974) Notulae Vespidologicae XXXV. Bollettino del Museo Civico di Storia Naturale di Venezia 24: 97-132.

Giordani Soika A (1975) Sul genre *Zeta* (Sauss.). Bollettino del Museo Civico di Storia Naturale di Venezia 27: 111-135.

Giordani Soika A (1978) Revisione degli Eumenidi neotropicali appartenenti ai generi *Eumenes* Latr., *Omicron* (Sauss.), *Pararaphidoglossa* [sic] Schulth. ed affini. Bollettino del Museo Civico di Storia Naturale di Venezia 29: 1-420.

Giordani Soika A (1982) Contributo alla conoscenza del genere neotropicale *Hypalastoroides* Sauss. (Hym. Vespoidea). Bollettino del Museo Civico di Storia Naturale di Venezia 32: 33-59.

Giordani Soika A (1990) Revisione degli Eumenidi neotropicali appartenenti ai generi *Pachymenes* Sauss., *Santamenes* n. gen., *Brachymenes* G. S., *Pseudacaromenes* G. S., *Stenosigma* G. S. e *Gamma* Zav. (Hymenoptera). Bollettino del Museo Civico di Storia Naturale di Venezia 39: 71-172.

Gordh G, Móczár L (1990) A catalog of the world Bethylidae (Hymenoptera: Aculeata). Memoirs of the American Entomological Institute 46: 1-364.

Goulet H, Huber JT (1993) Hymenoptera of the world: An identification guide to families. Ottawa, Centre for land and biological resources research, 668 pp.

Hanson PE, Gauld ID (Eds) (1995) The Hymenoptera of Costa Rica. Oxford, Oxford University Press, 920 pp.

Hanson PE, Gauld ID (2006) Hymenoptera de la Region Neotropical. Memoirs of the American Entomological Institute 77: 1-994.

Hermes MG, Melo GAR (2008) Revision and cladistic analysis of the eumenine wasp genus *Pseudodynerus* de Saussure (Hymenoptera, Vespidae, Eumeninae). Systematic Entomology 33: 361-394.

Kempf WW (1972) Catálogo abreviado das formigas da região Neotropical (Hymenoptera: Formicidae). Studia Entomologica 15: 3-344.

Kimsey LS (1985) Distinction of the *'Neochrysis'* genera and description of new species (Chrysididae, Hymenoptera). Psyche 92: 269-286.

Kimsey LS (1990) Zoogeography of the Amiseginae and a remarkable new chrysidid wasp from Chile (Hymenoptera). Psyche 97: 141-145.

Kimsey LS (1991a) Revision of the South American wasp genus *Aelurus* (Hymenoptera: Tiphiidae: Thynninae). Systematic Entomology 16: 223-237.

Kimsey LS (1991b) Additional new genera and species of South American thynnine wasps (Hymenoptera: Tiphiidae). Psyche 98: 71-80.

Kimsey LS (1991c) Relationships among the tiphiid wasp subfamilies (Hymenoptera). Systematic Entomology 16: 427-438.

Kimsey LS (1993) An unusual new tiphiid genus from Peru and a key to the American genera of Tiphiinae (Hymenoptera). Pan-Pacific Entomologist 69: 213-217.

Kimsey LS (1996) Revision of the South American thynnine genus *Upa* (Hymenoptera: Tiphiidae). Proceedings of the Entomological Society of Washington 98: 55-63.

Kimsey LS (2004) Illustrated keys to genera of the male wasps in the subfamily Thynninae (Hymenoptera: Tiphiidae). Proceedings of the Entomological Society of Washington 106: 571-585.

Kimsey LS (2008) The Neotropical chrysidid genus *Adelphe* Mocsáry revisited (Hymenoptera: Chrysididae: Amiseginae). Journal of Hymenoptera Research 17: 157-174.

Kimsey LS, Bohart RM (1990) The Chrysidid wasps of the world. Oxford, Oxford university press, 652 pp.

Kimsey LS, Brown GR (1993) Lectotype designations within the subfamily Thynninae (Hymenoptera: Tiphiidae). Journal of the Australian Entomological Society 32: 317-326.

Kimsey LS, Wasbauer MS (2004) Revision of New World species of the cleptoparasitic pompilid genus *Irenangelus* Schulz (Hymenoptera: Pompilidae). Journal of the Kansas Entomological Society 77: 650-668.

Kohl FF (1902) Hymenopterengruppe der Sphecinen. II. Monographie der neotropischen Gattung *Podium* Fabr. Abhandlungen der k.k. Zoologisch-Botanischen Gesellschaft in Wien 1: 1-101, pl. I-VII.

Krombein KV (1979) Studies in the Tiphiidae, XII. A new genus of Methocinae with notes on the subgenera of *Methoca* Latreille (Hymenoptera Aculeata). Proceedings of the Entomological Society of Washington 81: 424-434.

Laime M (1997) Bees and wasps (Hymenoptera: Aculeata): biodiversity assessment in the lower Urubamba region. Biodiversity Assessment and Monitoring (SI/MAB) series 1: 141-147.

Lamas G (1976) A gazetter of Peruvian entomological stations (based on Lepidoptera). Revista Peruana de Entomología 19: 17-25.

Leclercq J (1954) Monographie systématique, phylogénétique et zoogéographique des Hyménoptères Crabroniens. Les Presses de Lejeunia, Liège, 371 pp.

Leclercq J (1957) Recherches systématiques et taxonomiques sur le genre *Podagritus* (Hym. Sphecidae, Crabroninae). II.–Introduction à l'étude des espèces sud-américaines et révision des sousgenres *Echucoides* et *Echuca*. Bulletin (Institut Royal des Sciences Naturelles de Belgique) 33(22): 1-23.

Leclercq J (1972) Identification des Crabroniens du genre *Ectemnius* trouvés en Amérique Latine (Hymenoptera, Sphecidae, Crabroninae). Bulletin de la Société Royale des Sciences de Liège 41: 195-226.

Leclercq J (1980) Crabroniens d'Amérique Latine appartenant aux genres que Vernon S.L. Pate nomma *Chimila*, *Foxita* et *Taruma*. Bulletin de la Société Royale des Sciences de Liège 49: 70-83.

Leclercq J (1981) Crabroniens d'Amérique Latine appartenant aux genres *Entomocrabro* Kohl et *Tracheliodes* Morawitz (Hymenoptera Sphecidae). Bulletin & Annales de la Société Royale Belge d'Entomologie 116: 233-245.

Leclercq J (1991) Hyménoptères Sphécides Crabroniens du genre *Ectemnius* Dahlbom trouvés en Amérique Latine. Bulletin de la Société Royale des Sciences de Liège 60: 3-29.

Leclercq J (1995) Hyménoptères Sphécides Crabroniens du genre *Pae* Pate, 1944 d'Amérique Latine. Lambillionea 95: 83-90.

Leclercq J (1996) Hyménoptères sphécides crabroniens du genre *Anacrabro* Packard, 1866 des deux amériques. Lambillionea 46: 471-478.

Leclercq J 1999 (2000). Hyménoptères Crabronides Crabroniens d'Amérique latine du genre *Podagritus* Spinola, 1851. Notes fauniques de Gembloux 37: 3-55.

Leclercq J (2000) Hyménoptères Crabronides Crabroniens des Amériques du genre *Crossocerus* Lepeletier & Brullé, 1835. Notes fauniques de Gembloux 40: 3-75.

Leclercq J (2002a) Hyménoptères Crabronides Crabroniens de l'Amérique latine du genre *Quexua* Pate, (1942) Notes fauniques de Gembloux 46: 3-12.

Leclercq J (2002b) Hyménoptères Crabronides Crabroniens des Amériques du genre *Rhopalum* Stephens, 1829. Notes fauniques de Gembloux 48: 3-115.

Leclercq J (2005a) Hyménoptères Crabroniens de l'Amérique latine des genres *Pae* Pate, 1944 et *Quexua* Pate, 1942 (Hymenoptera: Crabronidae, Crabronini). Notes fauniques de Gembloux 55: 7-10.

Leclercq J (2005b) Hyménoptères Crabroniens de l'Amérique latine du genre *Foxita* Pate, 1942 (Hymenoptera: Crabronidae, Crabroninae). Notes fauniques de Gembloux. 56: 11-22.

Leclercq J (2005c) Hyménoptères Crabronidae Crabroniens néotropicaux des genres *Chimila* Pate, 1944, *Foxita* Pate, 1942, *Pae* Pate, 1944, et *Parataruma* Kimsey, 1982. Notes fauniques de Gembloux 58: 17-20.

Leclercq J (2006) Hyménoptères Crabroniens de l'Amérique latine du genre *Entomocrabro* Kohl, 1905 (Hymenoptera: Crabronidae Crabroninae). Notes fauniques de Gembloux 59: 47-53.

Linsenmaier W (1984) Das Subgenus *Trichrysis* in Nord- und Südamerika (Hym., Chrysididae, Genus *Chrysis* L.). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 57: 195-224.

Linsenmaier W (1985) Revision des genus *Neochrysis* Linsenmaier (Hymenoptera, Chrysididae). Entomofauna 6: 425-487.

Linsenmaier W (1987) Revision der familie Chrysididae (Hymenoptera). 4. Teil. Mitteilungen der Schweizerischen entomologischen Gesellschaft 60: 133-158.

Manlet DG, Pitts JP (2007) Tropical and subtropical velvet ants of the genus *Dasymutilla* Ashmead (Hymenoptera: Mutillidae) with descriptions of 45 new species. Zootaxa 1487: 1-128.

Menke AS (1988) *Pison* in the New World: a revision (Hymenoptera: Sphecidae: Trypoxylini). Contributions of the American Entomological Institute 24(3):1-171.

Menke AS (1992) Mole cricket hunters of the genus *Larra* in the new world (Hymenoptera: Sphecidae, Larrinae). Journal of the Hymenoptera Research 1: 175-234.

Menke AS (2004) *Ammophila hevans* Menke, a new species from southern South America with taxonomic notes on similar species (Hymenoptera: Apoidea: Sphecidae). Journal of the Kansas Entomological Society 77: 765-773.

Menke AS, Fernández F (1996) Claves ilustradas para las subfamilias, tribus y géneros de esfécidos Neotropicales (Apoidea: Sphecidae). Revista de Biologia Tropical 44 (suppl. 2): 1-68.

Menke AS, Vardy CR (1980) A synopsis of the tribe Scapheutini (Hymenoptera: Sphecidae). Papéis Avulsos de Zoologia (São Paulo) 34: 73-85.

Menke AS, Willink A (1964) A survey of the Neotropical species of *Chlorion* (Hymenoptera: Sphecidae). Annals of the Entomological Society of America 57: 548-552.

Mickel CE (1938) The Neotropical mutilid wasps of the genus *Timulla* Ashmead (Hymenoptera: Mutillidae). Transactions of the Royal Entomological Society of London 87: 529-680.

Mickel CE (1939a) A monograph of the Neotropical mutillid genus *Hoplomutilla* Ashmead (Hymenoptera: Mutillidae). Revista de Entomologia 10: 337-403.

Mickel CE (1939b) A monograph of the Neotropical mutillid genus *Hoplomutilla* Ashmead (Hymenoptera: Mutillidae) (conclusion). Revista de Entomologia 10: 641-717.

Mickel CE (1939c) Monograph of a new Neotropical mutillid genus, *Pappognatha*. Annals of the Entomological Society of America 32: 329-343.

Mickel CE (1941) Monograph of the South American mutillid genus *Hoplocrates* Mickel (Hymenoptera: Mutillidae). Revista de Entomologia 12: 341-414.

Mickel CE (1943) The South American genus *Atillum* André (Hymenoptera, Mutillidae). Revista de Entomologia 14: 174-254.

Mickel CE (1952) The Mutillidae (wasps) of British Guiana. Zoologica (New York) 37: 105-150.

Móczár L (1990) Revision of the subgenus *Bifidoceropales* Priesner of the genus *Ceropales* Latreille (Hymenoptera: Ceropalidae). Acta Zoologica Hungarica 36: 59-85.

Móczár L (1996) Additions to American Cleptinae (Hymenoptera: Chrysididae). Memoirs of the Entomological Society of Washington 17: 153-160.

Nagy CG (1973) Revisionary studies on the family Plumariidae Bischoff (Hymenoptera, Heterogynoidea). Folia Entomologica Hungarica 26 (suppl.): 255-267.

Naumann MG (1968) A revision of the genus *Brachygastra* (Hymenoptera: Vespidae). University of Kansas Science Bulletin 47: 929-1003.

Nonveiller G (1990) Catalogue of the Mutillidae, Myrmosidae, and Bradynobaenidae of the Neotropical region including Mexico: (Insecta: Hymenoptera). Hymenopterorum Catalogus 18: 1-150.

Olmi M (1984) A revision of the Dryinidae (Hymenoptera). Memoirs of the American Entomological Institute. 37: 1-1913.

Olmi M (1986) New species and genera of Dryinidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 7-8(20-21). 63-105.

Olmi M (1987) New species of Dryinidae (Hymenoptera, Chrysidoidea). Fragmenta Entomologica 19: 371-456.

Olmi M (1989) Supplement to the revision of the world Dryinidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 12(25): 109-395.

Olmi M (1992a) Contribution to the knowledge of the Gonatopodinae (Hymenoptera, Dryinidae). Bollettino dell'Istituto di Entomologia "Guido Grandi" della Universitá degli Studi di Bologna 46: 109-122.

Olmi M (1992b) Descriptions of new taxa of Dryinidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 15(28): 19-62.

Olmi M (1993) A new generic classification for Thaumatodryininae, Dryininae and Gonatopodinae, with descriptions of new species (Hymenoptera Dryinidae). Bollettino di Zoologia Agraria e di Bachicoltura 25: 57-89.

Olmi M (1996a) A revision of the world Embolemidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 18(31): 85-146.

Olmi M (1996b) Taxonomic remarks on American Dryinidae, with descriptions of new species (Hymenoptera, Chrysidoidea). Redia 79: 57-81.

Olmi M (1997a) A contribution to the knowledge of the Embolemidae and Dryinidae (Hymenoptera, Chrysidoidea). Bollettino di Zoologia Agraria e di Bachicoltura 29: 125-150.

Olmi M (1997b) New Embolemidae and Dryinidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 20(33): 30-118.

Olmi M (1999) Description of two new species of *Ampulicomorpha* (Hymenoptera, Embolemidae). Bollettino di Zoologia Agraria e di Bachicoltura 31: 1-10.

Olmi M (2001) Contributo alla conoscenza dei Dryinidae (Hymenoptera, Chrysidoidea). Frustula Entomologica, n.s. 34(37): 21-49.

Olmi M (2004) A revision of the world Sclerogibbidae (Hymenoptera Chrysidoidea). Frustula Entomologica, n.s. 39-40: 46-193.

Olmi M, Virla EG, Fernández F (2000) Las avispas Dryinidae de la región Neotropical (Hymenoptera: Chrysidoidea). Biota Colombiana 1: 141-163.

Palacios ME (1976) Fuentes florales silvestres para *Apis mellifera ligustica* Spinola, 1806 y otros Hymenoptera en Lima y valles adyacentes. Biologist thesis, Universidad Nacional Mayor de San Marcos, Lima, Peru.

Parker FD (1968) On the subfamily Astatinae. Part IV. The South American species in the genus *Astata*. Annals of the Entomological Society of America 61: 844-852.

Parker JB (1929) A generic revision of the fossorial wasps of the tribes Stizini and Bembicini, with notes and descriptions of new species. Proceedings of the United States National Museum 75(5): 1-203.

Pate VSL (1947) Neotropical Sapygidae, with a conspectus of the family. Acta Zoologica Lilloana 4: 393-426.

Penteado-Dias AM, Achterberg C van (2002) First record of the genus *Probethylus* Ashmead (Sclerogibbidae: Probethylinae) from Brazil, with description of a new species. Zoologische Mededelingen 76: 105-107.

Pickett KM, Wenzel JW (2007) Revision and cladistic analysis of the nocturnal social wasp genus, *Apoica* Lepeletier (Hymenoptera: Vespidae; Polistinae, Epiponini). American Museum Novitates 3562: 1-30.

Pitts JP, Wabauer MS, Dohlen CD (2006) Preliminary morphological analysis of relationships between the spider wasp subfamilies (Hymenoptera: Pompilidae): revisiting an old problem. Zoologica Scripta 35: 63-84.

Pulawski WJ (1974) A revision of the Neotropical *Tachysphex* Kohl (Hym., Sphecidae). Polskie Pismo Entomologiczne 44: 3-102.

Pulawski WJ (2009a) Bibliography of Sphecidae. http://www.calacademy.org/research/entomology/Entomology_Resources/Hymenoptera/sphecidae/bibliography.pdf [accessed June 15, 2009].

Pulawski WJ (2009b) Catalog of Sphecidae. http://www.calacademy.org/research/entomology/Entomology_Resources/Hymenoptera/sphecidae/Genera_and_species_PDF/introduction.htm [accessed June 15, 2009].

Quintero D, Cambra RA (1996) Contribución a la sistemática de las Mutílidas (Hymenoptera) del Perú, en especial las de la estación biológica BIOLAT, Río Manu, Pakitza. Manu, the biodiversity of southeastern Peru. In: Wilson DE, Sandoval A (Eds) Smithsonian institution, p. 327-357.

Quintero D, Cambra RA (2005) *Pappognatha* Mickel (Hymenoptera: Mutillidae: Sphaeropthalminae): new species, sex associations, hosts, and new distribution records. Journal of Hymenoptera Research 14: 191-199.

Richards OW (1934) The American species of the genus *Trypoxylon* (Hymenopt., Sphecoidea). Transactions of the Royal Entomological Society of London 82: 173-362.

Richards OW (1939) The Bethylidae subfamily Sclerogibbinae (Hymenoptera). Proceedings of the Royal Entomological Society, Series B 8: 211-223.

Richards OW (1962) A revisional study of the masarid wasps (Hymenoptera, Vespoidea). British Museum (Natural History), London, 294 pp.

Richards OW (1978) The social wasps of the Americas, excluding the Vespinae. British Museum (Natural History), London, 580 pp.

Rohwer SA (1913) Results of the Yale Peruvian Expedition of 1911. Hymenoptera, Superfamilies Vespoidea and Sphecoidea. Proceedings of the United States National Museum 44: 439-454.

Roig-Alsina A (1981) Revision del género *Entypus* Dahlbom en la Argentina (Hymenoptera: Pompilidae). Revista de la Sociedad Entomologica de Argentina 40: 311-336.

Roig-Alsina A 1984 (1985). Contribucion al conocimiento de los Pepsinae sudamericanos. II. El género *Adirostes* Banks (Hymenoptera, Pompilidae). Revista de la Sociedad Entomológica de Argentina 43: 165-170.

Roig-Alsina A (1989) La posición sistemática de los grupos hasta ahora incluidos en *Chirodamus* Haliday sensu lato y revisón de *Pompilocalus* gen. nov. (Hymenoptera, Pompilidae). Revista de la Sociedad Entomológica de Argentina 47: 3-73.

Roig-Alsina A (1994) A new genus of Plumariidae, with notes on the relationships among the genera of the family (Hymenoptera, Chrysidoidea, Plumariidae). Mitteilungen der Münchner Entomologischen Gesellschaft 84: 91-96.

Rubio-Espina E (1975) Revisión del género *Trachypus* Klug (Hymenoptera: Sphecidae). Revista de la Facultad de Agronomía (LUZ) (Maracaibo) 3: 7-87.

Shetlar DJ (1973) A redescription and biology of *Probethylus schwarzi* Ashmead (Hymenoptera: Sclerogibbidae) with notes on related species. Entomological News 84: 205-210.

Shimizu A (1994) Phylogeny and classification of the family Pompilidae (Hymenoptera). Tokyo Metropolitan University Bulletin of Natural History 2: 1-142.

Silveira OT (2006) Revision of the subgenus *Kappa* de Saussure of *Mischocyttarus* de Saussure. Zootaxa 1321: 1-108.

Silveira OT, Carpenter JM (1995) *Protopolybia bituberculata*, a new Neotropical social wasp (Hymenoptera: Vespidae; Polistinae). Journal of the New York Entomological Society 103: 48-54.

Soukup J (1943) Algunos Himenópteros peruanos. Boletin del Museo de Historia Natural "Javier Prado" (Lima) 7: 253-274.

Stange LA (1976) Una nueva especie de *Zethus* F. del grupo *sichelianus* de Peru (Hymenoptera: Eumenidae). Acta Zoologica Lilloana 32: 67-72.

Stange LA 1978 Los *Zethus* del desierto costero de Peru. Acta Zoologica Lilloana 33: 71-78.

Stein PRW, Azevedo CO (2007) Synopsis of *lobatifrons* species-group (Hymenoptera: Bethylidae, *Rhabdepyris*) from Neotropical region, with redefinition of the group. Zootaxa 1444: 23-34.

Stephens L, Traylor MAJ (1983) Ornithological gazetter of Peru. Cambridge, Mass, 271 pp.

Suárez FJ (1970) Datos sobre mutilidos neotropicales, VII: Algunas especies del Perú representadas en las colecciones del Museo de Historia Natural de Basilea (Suiza) (Hymenoptera). Archivos del Instituto de Aclimatación (Almería) 15: 169-188.

Terayama M (2003) Phylogenetic systematics of the family Bethylidae (Insecta: Hymenoptera), part II. keys to subfamilies, tribes and genera in the world. The Academic Reports, the Faculty of Engineering, Tokyo Institute of Polytechnics: 16-29.

Townes H (1977) A Revision of the Rhopalosomatidae (Hymenoptera). Contributions of the American Entomological Institute 15: 1-34.

van der Vecht J, Carpenter JM (1990) A catalogue of the genera of the Vespidae (Hymenoptera). Zoologische Verhandelingen 260: 3-62.

van der Vecht J, van Breugel FMA (1968) Revision of the nominate subgenus *Sceliphron* Latreille (Hymenoptera, Sphecidae) (Studies on the Sceliphronini, Part I). Tijdschrift voor Entomologie 111: 185-255.

van Lith JP (1975) Neotropical species of *Psen* and *Pseneo* (Hymenoptera, Sphecidae, Psenini). Tijdschrift voor Entomologie 118:1-37.

van Lith JP (1979) The New World genus *Pluto* (Hymenoptera, Sphecidae, Psenini). Tijdschrift voor Entomologie 122:127-239.

Vardy CR (1978) A revision of the Neotropical wasp genus *Trigonopsis* Perty (Hymenoptera: Sphecidae). Bulletin of the British Museum (Natural History), Series Entomology 37:117-152.

Vardy CR (2000) The new world tarantula-hawk wasp genus *Pepsis* Fabricius (Hymenoptera: Pompilidae). Part 1. Introduction and the *P. rubra* species group. Zoologische Verhandelingen 332: 1-86.

Vardy CR (2002) The new world tarantula-hawk wasp genus *Pepsis* Fabricius (Hymenoptera: Pompilidae). Part 2. The P. *grossa*- to P. *deaurata*-groups. Zoologische Verhandelingen 338: 1-135.

Vardy CR (2005) The new world tarantula-hawk wasp genus *Pepsis* Fabricius (Hymenoptera: Pompilidae). Part 3. The *P. inclyta-* to *P. auriguttata*-groups. Zoologische Mededelingen 79: 1-305.

Wahis R, Rojas F (2003) Los Pompílidos de Chile (Hymenoptera: Pompilidae). Revista Chilena de Entomología 29: 89-103.

Ward PS, Bolton BB, Shattuck SO, Brown WL (1996) A bibliography of ant systematics. University of California Publications in Entomology 116:1-417.

Wenzel JW (1998) A generic key to the nests of hornets, yellowjackets, and paper wasps worldwide (Vespidae: Vespinae, Polistinae). American Museum Novitates 3224: 1-39.

Weyrauch WK (1940) Observaciones entomológicas en el Valle de Chanchamayo y en Tingo María (resultados obtenidos en un viaje de estudios zoológicos). Boletin del Museo de Historia Natural "Javier Prado" (Lima) 4: 346-359.

Weyrauch WK (1942) Nidos de insectos peruanos en el Museo de Historia Natural. Boletin del Museo de Historia Natural "Javier Prado" (Lima) 6: 52-66.

Weyrauch WK (1943) La distribución de las avispas sociales en el Perú. Boletin del Museo de Historia Natural "Javier Prado" (Lima) 7: 66-95.

Willink A (1949) Las especies Neotropicales de *Bembicinus* (Hymenoptera, Sphecidae, Nyssoninae, Stizini). Acta Zoologica Lilloana 7: 81-112.

Willink A (1969) Las especies del género *Incodynerus* Willink (Hym., Eumendiae). Acta Zoologica Lilloana 24: 65-88.

Willink A (1970) Revisión del género *Hypodynerus* Saussure (Hym., Eumenidae). I. Grupo de *Hypodynerus humeralis* (Hal.). Acta Zoologica Lilloana 25: 227-278.

Willink A (1978) Revisión del género *Hypodynerus* Saussure (Hym., Eumenidae). III. Grupo de *H. excipiendus* (Spinola). Acta Zoologica Lilloana 33: 15-31.

Willink A (1982) Revisión de los géneros *Montezumia* Saussure y *Monobia* Saussure (Hymenoptera: Eumenidae). Boletín de la Academia Nacional de Ciencias, Córdoba 55: 3-321.

Willink A, Roig-Alsina A (1998) Revisión del genero *Pachodynerus* Saussure (Hymenoptera: Vespidae, Eumeninae). Contributions of the American Entomological Institute 30: 1-117.

Woytkowski F (1978) Peru, my unpromised land [Peru, moja ziemia nieobiecana]. Springfield, VA, Foreign scientific publications, 230 pp.

Zavattari E (1912) Materialien für eine monographie der Neotropischen Eumeniden. Archiv für Naturgeschichte. Abt. A 78(4): 1-272.

Appendix 1. Localities reported in the checklist including coordinates and altitude range (m a.s.l.).

Department	Locality	Longitude	Latitude	Altitude
AMAZONAS	Bagua (grande)	-78.43333	-5.75000	400
	Chachapoyas	-77.88333	-6.23333	2350
	Leimebamba	-77.76667	-6.71667	2300
	Pomacochas	-77.96667	-5.81667	2200
	Rodríguez de Mendoza	-77.48333	-6.40000	1500
	Santiago, Río	-77.63333	-4.43333	
	Sonche, Río	-77.90000	-6.10000	2300
ANCASH	Cajacay	-77.43333	-10.16667	2650
	Caraz	-77.81667	-9.05000	2400
	Casma	-78.31667	-9.46667	39
	Conococha, Lago	-77.28602	-10.12272	4150
	Huallanca	-77.86667	-8.81667	1400
	Huaráz	-77.53333	-9.53333	3050
	Huaylas	-77.90000	-8.85000	2750-2900
	Recuay	-77.46667	-9.71667	3400
	Yungay	-77.75000	-9.13333	2462
APURIMAC	Abancay	-72.86667	-13.63333	2300-2500
	Andahuaylas	-73.40000	-13.65000	2950
	Curahuasi	-72.70000	-13.55000	2750
	Cuya			
AREQUIPA	Arequipa	-71.51667	-16.38333	2300
	Atiquipa	-74.36667	-15.75000	300
	Camaná	-72.71667	-16.61667	10
	Caravelí	-73.38333	-15.75000	1800
	Cháparra, Lomas de	-73.86246	-15.73924	1450
	Cotahuasi	-72.90000	-15.20000	3000
	El Pasto	-71.54058	-16.46339	
	Ocoña	-73.10000	-16.43333	50
	Sabandia	-71.49587	-16.45018	
	Tambo	-71.83333	-17.06667	100
	Tiabaya	-71.59044	-16.44884	2200
	Tingo	-71.56667	-16.43333	2300
	Yura	-71.66667	-16.25000	2600
AYACUCHO	Ayacucho	-74.21667	-13.16667	2000-2750
	Blanco, Río			
	Cangallo	-74.14290	-13.62840	2600
	Chacco	-74.20000	-13.08333	2700
	Huanta	-74.25000	-12.93333	2600
	Huatatas	-74.19446	-13.15193	
	Lucanas	-74.25000	-14.60000	3350

Department	Locality	Longitude	Latitude	Altitude
AYACUCHO	Luisiana, Hacienda	-73.71667	-12.66667	500
	Ninabamba	-74.55000	-13.35000	3900
	Pampas, Río	-74.08333	-13.66667	2600
	Quinua	-74.13740	-13.04870	
	San Francisco	-73.80000	-12.61667	600
	San Miguel	-73.96667	-13.01667	2700
	San Pedro	-74.09820	-14.76790	
	Sivia	-73.85812	-12.51257	
	Tambo	-74.01667	-12.95000	3200
	Teresita			
CAJAMARCA	Bellavista	-78.65000	-5.61667	700
	Cajamarca	-78.51667	-7.15000	2800
	Carahuasi	-79.16670	-7.01667	
	Celendin	-78.15000	-6.86667	2625
	Chilete	-78.83333	-7.21667	1050
	Chontabamba	-78.75000	-6.91667	
	Cutervo, San Andrés de	-78.70000	-6.21667	2750
	Huascaray	-79.29387	-5.32489	
	Jaén	-78.81667	-5.70000	750
	Lajas	-78.73333	-6.56667	2300
	Limón	-78.06667	-6.85000	1600
	Limón, Quebrada	-78.08333	-6.83333	2000
	Nancho, Quebrada	-79.25000	-6.96667	400
	Otuzco	-78.46667	-7.13333	2300
	Pomahuaca	-79.23333	-5.93333	1100
	Querocotillo	-79.03333	-6.28333	2000
	San Ignacio	-79.00000	-5.15000	1100-1300
	Sunchubamba, Hacienda, nr. Cascas	-78.40000	-7.48333	2500
	Tembladera	-79.13333	-7.25000	400
CALLAO	Callao	-77.15000	-12.06667	10
CUSCO	Abancay-Cusco	-72.00000	-13.58333	
	Acjanaco	-71.61667	-13.20000	
	Acomayo	-71.68333	-13.91667	3200
	Aguas Calientes	-72.51667	-13.15000	2050-2200
	Alto Sambaray (nr. Quillabamba)	-72.70000	-12.86667	950-1050
	Atalaya	-71.35000	-12.90000	600
	Barrio Magisterial	-71.94770	-13.52570	
	Cajón, Hacienda	-71.55000	-13.06667	1330
	Callanga, Hacienda	-71.81667	-12.83333	1500
	Capana, Hacienda	-71.41667	-13.46667	3500
	Chocco, Quebrada	-71.39470	-14.51190	

Department	Locality	Longitude	Latitude	Altitude
	Cosñipata, Río	-71.40000	-12.98333	800
	Cusco	-71.98333	-13.51667	3400-4200
	Huadquiña	-72.60000	-13.11667	1500
	Huaisampillo	-71.36667	-13.26667	3000
	Limatambo	-72.43333	-13.48333	2500
	Lucre	-71.73333	-13.63333	3050
	Machu Picchu	-72.54579	-13.16319	2385-2700
	Mándor	-70.90000	-13.36667	1100
	Marcapata	-70.91667	-13.43333	1500
	Miravalle	-71.98333	-13.51667	
	Ocobamba	-72.43333	-12.88333	1600
	Ollantaytambo	-72.25000	-13.25000	2700
	Pampas, Río	-73.25000	-13.38333	
	Paucartambo	-71.60000	-13.31667	2900
	Pichari, Río	-73.80000	-12.50000	
CUSCO	Pisaq	-71.85000	-13.43333	3000
	Quillabamba	-72.70000	-12.86667	950-1050
	Quincemil	-70.76667	-13.23333	630-650
	Rumipampa	-79.58972	-5.76000	
	Sacsayhuaman	-71.98333	-13.50000	
	Sahuaycu (probably Sahuyacu, not located)			
	San Miguel	-72.56667	-13.16667	1650-2000
	San Sebastián	-71.56030	-13.31400	3200
	Santa Ana	-72.73333	-12.86667	1000
	Santa Isabel	-71.53333	-13.05000	1350
	Sicuani	-71.23333	-14.26667	3500
	Tambo, Río			
	Tincochaca	-72.93333	-13.11667	2300
	Vilcanota, Río	-71.30000	-13.76667	
	Yucay	-72.08489	-13.32188	
	Ambo	-76.20000	-10.13333	2050
	Azul, Cordillera	-75.93333	-9.15000	1600
	Carpish, cordillera	-76.10000	-9.71667	2500-2800
	Cayumba, Puente (Cayumba grande)	-75.95000	-9.50000	800
HUANUCO	Chinchao	-76.06667	-9.65000	2000
	Cozumbe			
	Cuchara	-76.70000	-9.10000	750
	Cueva de las Pavas	-75.96667	-9.40000	800
	Divisoria, La	-75.83333	-9.21667	1600
	Huánuco	-76.23333	-9.91667	1900

Department	Locality	Longitude	Latitude	Altitude
HUANUCO	Iparía, Bosque Nacional de	-74.80000	-8.95000	250-300
	Jumbatis			
	Las Palmas	-75.98333	-9.35000	700-1000
	Llullapichis	-74.93333	-9.61667	260
	Monzón, Valle de	-76.40000	-9.28333	950
	Pachitea, Río	-74.53333	-8.76667	150
	Palcazu, Río	-74.56000	-9.54000	
	Tambello Chica (E Tingo María)	-76.00000	-9.30000	670
	Tingo María	-76.00000	-9.30000	670
	Yurac	-75.01000	-9.20000	
HUANCAVELICA	Anco (= La Esmeralda)	-74.60000	-12.63333	2500
	Campo Armiño	-74.65000	-12.35000	1880
	Colorado, Río			
	La Mejorada	-74.99663	-12.50069	2850
	Mariño			
	Pachachaca	-75.02657	-12.71009	
	Santo Tomás	-74.42000	-13.11250	110
ICA	Chincha, Alta	-76.15000	-13.41667	120
	Huacachina, Laguna	-75.76667	-14.08333	400
	Ica	-75.71667	-14.06667	400
	Palpa	-75.18597	-14.53471	
	Pisco	-76.21667	-13.71667	10
JUNIN	Acobamba	-75.68333	-11.33333	3500
	Acolla	-75.55000	-11.73333	3450
	Casa de patos	-76.08333	-10.91667	4000
	Casapalo (nr. Junín)	-76.00000	-11.16667	4100
	Chanchamayo, Valle de	-75.31667	-11.05000	700
	El Campamento, Hacienda	-75.25000	-10.95000	650
	Huacapistana	-75.51667	-11.23333	1800-2500
	Huancayo	-75.20000	-12.06667	2000-3500
	Jauja	-75.50000	-11.78333	3400
	La Merced	-75.31667	-11.05000	750
	La Oroya	-75.90000	-11.51667	3700
	Mariposa	-74.75000	-11.40000	1200
	Oreja de Capelo	-75.45000	-11.18333	1600
	Palca, Río	-75.36667	-11.11667	1650
	Pampa Hermosa	-74.76667	-11.41667	1600
	Pampa Silva	-75.23333	-10.95000	650
	Pan de Azúcar	-75.48333	-11.13333	1600
	Paratushiali	-74.70081	-11.28952	
	Perené, Colonia del	-75.25000	-10.90000	750

Department	Locality	Longitude	Latitude	Altitude
JUNIN	Pichita, Mina	-75.41667	-11.08333	2100
	San Luis de Shuaro	-75.28333	-10.88333	750
	San Ramón	-75.35000	-11.13333	900
	Satipo, San Francisco de	-74.63333	-11.25000	650-900
	Tarma	-75.70000	-11.41667	3050
	Tarma-Jauja	-75.58333	-11.58333	
LAMBAYEQUE	Chiclayo	-79.85000	-6.76667	21
	Chinche, Quebrada			
	Chongoyape	-79.40000	-6.65000	200
	Lambayeque	-79.90000	-6.70000	20
	Motupe	-79.70000	-6.16667	100
	Olmos	-79.75000	-5.98333	150
	Oyotun	-79.30369	-6.85457	
	Oyotun	-79.31667	-6.85000	200
	Tumán	-79.71667	-6.75000	100
	Zaña, Río (Río Saña)	-79.71667	-7.08333	
LIMA	Atocongo	-76.91667	-12.20000	200
	Barranca	-76.90822	-12.19815	49
	Callahuanca	-76.61704	-11.82699	1760
	Canta	-76.62357	-11.46712	3000-4200
	Cañete, San Vicente	-76.38333	-13.08333	30
	Chancay	-77.25000	-11.56667	50
	Chilca	-76.45000	-12.31000	20
	Chillón, Río	-77.08333	-11.91667	
	Chontay	-76.71056	-12.03373	650
	Chorrillos	-77.03333	-12.16667	100
	Chosica	-76.70000	-11.93333	850
	Churín	-76.86667	-10.81667	2400
	Cieneguilla	-76.81160	-12.11730	
	Cocachacra	-76.53333	-11.90000	1400
	Cocayalta	-76.90323	-11.67982	
	Cupiche	-76.61330	-11.91518	
	Huamantanga, nr. Canta	-76.61667	-11.45000	3000-4200
	Huaura	-77.60000	-11.06667	65
	Huinco	-76.61374	-11.76942	1850
	La Molina	-76.95000	-12.06667	250
	Lachay, Lomas de	-77.36667	-11.33333	300-900
	Lima	-77.03333	-12.05000	150
	Lurín, Río	-76.90000	-12.25000	50
	Matucana	-76.38550	-11.84576	2400
	Minita, Cerro	-76.95000	-11.75000	
	Ocean cliff	-77.03333	-12.13333	120

Department	Locality	Longitude	Latitude	Altitude
LIMA	Pachacámac	-76.86667	-12.21667	20
	Palle, San José de	-76.65000	-11.86667	1300
	Pativilca	-77.75993	-10.75415	80
	Pueblo Libre	-77.06667	-12.08333	10
	Puruchuco	-76.93333	-12.05000	300
	Quilmaná	-76.38366	-12.95018	500
	Rímac, Río	-77.14264	-12.03073	
	San Bartolomé	-76.53333	-11.91667	1800
	San Mateo	-76.30000	-11.75000	3200
	Santa Eulalia	-76.65000	-11.90000	1050
	Santa Rosa de Quives	-76.78877	-11.66904	1550
	Santiago de Surco	-76.96890	-12.11520	
	Surco, San Jerónimo de	-76.45000	-11.86667	2000
	Tambo (Rímac)			
	Verde, Quebrada	-76.88333	-12.21667	80-480
	Verrugas, Puente	-76.50000	-11.88333	1700
	Vista Alegre	-77.01667	-12.13333	60
LA LIBERTAD	Cartavio	-79.23333	-7.88333	0
	Cascas	-78.81667	-7.48333	1300
	Chan-chan	-79.08333	-8.10000	
	Chepén	-79.45000	-7.21667	130
	Chicama	-79.15000	-7.83333	125
	Choquisongo (=Chuquizonco)	-78.41667	-7.75000	2200
	Chusgón	-77.91667	-7.83333	2300
	Guadelupe, Acequia de	-79.46667	-7.25000	92
	Laredo	-78.95000	-8.10000	90
	Moche	-79.00000	-8.16667	10
	Pacasmayo	-79.56667	-7.41667	20
	Pacasmayo-Cajamarca	-79.33333	-7.25000	
	Paiján	-79.31667	-7.73333	80
	Samne	-78.66667	-7.98333	1500-1600
	San Pedro de Lloc	-79.50000	-7.43333	50
	Simbal	-78.81667	-7.96667	576
	Trujillo	-79.03333	-8.11667	20
LORETO	Amazonas-Napo, Rios	-72.65000	-3.46667	
	Cerro Azul	-74.63333	-7.21667	500
	Contamana	-75.00000	-7.35000	150
	Dos de Mayo	-75.11667	-6.40000	100
	El Encanto			
	Explorama	-72.85000	-3.45000	120
	Huallaga, Río	-75.53333	-5.16667	

Department	Locality	Longitude	Latitude	Altitude
	Huallaga, Upper Río	-75.53333	-5.16667	
	Iquitos	-73.25000	-3.75000	100
	Itaya, Río	-73.23333	-3.78333	100
	La Chorrera			
	La Sombra			
	Marañón, Río			
	Mishuyacu, Río	-73.30000	-3.78333	120
	Nanay, Río	-73.21667	-3.65000	
	Nauta	-73.58333	-4.50000	100
	Nuevo Requena (R Aguaytía)	-73.83333	-4.96667	100
	Pacaya-Samiria			
	Pebas	-71.85000	-3.31667	
LORETO	Peru-Brasil border			
	Putumayo, Río	-70.06667	-2.73333	
	Quistococha	-73.31667	-3.83333	120
	San Antonio	-76.48441	-4.92240	120
	San Roque	-73.33333	-3.80000	100
	Sucusari, Río	-72.90000	-3.26667	
	Sucusari, Rio Napo	-72.91776	-3.25696	
	Tapiche, Río	-73.84283	-5.04838	
	Ucayali, Middle Río	-73.45000	-4.50000	
	Ucayali, Río	-73.45000	-4.50000	
	Varillal (Iquitos)	-73.35000	-3.90000	100
	Yanayacu	-76.26667	-5.88333	
	Yurimaguas	-76.10000	-5.90000	150
	Avispas	-70.35000	-12.98333	350
	Cocha Cashu	-71.41667	-11.88333	350
	Iberia	-69.48907	-11.40988	
	Iberia	-69.48333	-11.41667	200-275
	Infierno	-69.39313	-12.82333	
MADRE DE DIOS	La Torre, Río, Boca	-69.28333	-12.83333	250
	Manú	-70.91280	-12.27480	
	Pakitza	-71.28333	-11.95000	400
	Panticolla [lodge]	-71.24100	-12.60100	
	Piedras, Río de las	-69.23333	-12.50000	
	Puerto Maldonado	-69.18333	-12.60000	200
	Tambopata, Río	-69.18333	-12.60000	
	Huancabamba	-75.55000	-10.38333	600-1600
	Iscozacín	-75.15000	-10.18333	320
PASCO	Oxapampa	-75.40000	-10.58333	1800
	Pichis, Río	-74.93333	-9.90000	300
	Pozuzo	-75.53333	-10.11667	8-900

Department	Locality	Longitude	Latitude	Altitude
PASCO	Puerto Bermúdez	-74.93333	-10.30000	3-700
	Victoria, Quebrada (Carhuamayo-Paucartambo)	-76.33333	-10.90000	
	Villa Rica	-75.26667	-10.71667	1500
PIURA	Amotape	-81.01667	-4.88333	20
	Lobitos	-81.28333	-4.45000	30
	Mogollón	-80.91462	-4.92071	
	Morropón	-80.00000	-5.20000	130
	Negritos	-81.30000	-4.65000	10
	Paita	-81.11667	-5.08333	20
	Palo Negro	-80.34400	-4.35230	
	Pariñas, Río	-81.26667	-4.51667	10
	Piura	-80.63333	-5.18333	40
	Sullana	-80.68333	-4.88333	100
	Suyo	-80.00000	-4.50000	400
	Talara	-81.27190	-4.58073	0
	Tambillo	-79.48892	-5.08658	
	Zapayal	-80.71667	-5.85000	
PUNO	Amantaní, Isla	-69.71667	-15.66667	3500
	Arapa	-70.11667	-15.13333	3850
	Ayaviri	-70.58810	-14.87780	
	Camacani	-69.86667	-15.93333	3700
	Chimú	-69.96667	-15.85000	3800
	Chucuito	-69.88922	-15.89348	3850
	Chuquibambilla	-70.73333	-14.80000	3900
	Crucero Alto	-70.91667	-15.78333	4100
	La Huerta (nr. Titicaca)	-69.43300	-15.47540	3800
	Puno	-70.03333	-15.83333	3800-4200
	Santo Domingo	-69.79050	-13.71738	
	Sillustani	-70.15690	-15.72200	
	Tirapata	-70.40000	-14.95000	4200
	Urcunimuni	-69.94073	-15.53970	
SAN MARTIN	Achinamisa	-75.85000	-6.41667	150
	Bellavista	-76.58333	-7.06667	300
	Cumbasa, San Antonio de	-76.40000	-6.41667	400
	Juanjuí	-76.73333	-7.18333	300
	La Masa			
	Magdalena, Río	-76.21667	-8.78333	
	Mishollo, Río	-76.66667	-8.00000	SM
	Moyobamba	-76.96667	-6.03333	900
	Rioja	-77.16667	-6.06667	900
	Tarapoto	-76.36667	-6.48333	350
	Tocache	-76.51667	-8.18333	470

Department	Locality	Longitude	Latitude	Altitude
TACNA	Tacna	-70.25000	-18.00000	550
	Tarata	-70.01667	-17.46667	3100
TUMBES	Estero Bendito	-80.30000	-3.45000	
	La Palma	-80.21750	-3.56155	
	Las Virgenes			
	Papayal	-80.25000	-3.56667	50
	Pocitos	-80.24116	-3.50904	
	Puerto Pizarro	-80.40000	-3.50000	0
	Tumbes	-80.46667	-3.56667	10
UCAYALI	Atalaya	-73.76667	-10.73333	250
	B Abad (=Boquerón del Padre Abad)	-75.68061	-9.07082	500
	Cachi, Río			
	La Junta			
	Neshuya	-74.96667	-8.65000	240
	Previsto	-75.63333	-9.05000	420-500
	Pucallpa	-74.53055	-8.37971	180
	San Alejandro	-75.20000	-8.83333	200
	Sinchona, Fundo (Cinchona)	-75.76667	-9.08333	1300-1600
	Urubamba, Río	-73.76667	-10.70000	1000-2800
	Yarinacocha	-74.60000	-8.35000	150
Unplaced	Chacarilla			
	San Jorge			
	San Paulo			
	Palon			

Appendix 2.

Occurrence data (XLS format) for all records of Peruvian aculeate wasps.
File format: Microsoft Excel (1997-2003). doi: 10.3897/zookeys.15.196.app.2.ds.

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Appendix 3.

Occurrence data (KML format) for all records of Peruvian aculeate wasps. File format: KML (Keyhole Markup Language) version 2.1 for GoogleEarth. doi: 10.3897/zookeys.15.196.app.3.ds

Note: The records can be viewed interactively in Google Earth (http://earth.google.com/) at a species-by-locality base.

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Appendix 4.

Localities (KML format) reported in the checklist. File format: KML (Keyhole Markup Language) version 2.1 for GoogleEarth. doi: 10.3897/zookeys.15.196.app.4.ds

Note: The records can be viewed interactively in Google Earth (http://earth.google.com/).

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Citations of the datasets:

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Dataset published as Appendix 3:

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